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> The Effects of Round Table Public Process and Technology Transfer on the Perceptions of the Public Toward Public Involvement and Ecosystem Management

FINAL REPORT FOR RESEARCH AGREEMENT #INT-94930-RJVA

"Effects of Round Table Public Process and Technology Transfer on Perceptions of the Public Toward Public Involvement and Ecosystem Management"

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The Effects of Round Table Public Process and Technology Transfer on the Perceptions of the Public Toward Public Involvement and Ecosystem Management

Final Report

Project NO. INT-94930-RJVA

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Submitted to:

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Introduction

This project began in June of 1994 with the intention of supplementing the Human Dimension of the Bitterroot Ecosystem Management and Research Project (BEMRP), a joint venture between the USDA Forest Service Intermountain Research Station, the Bitterroot National Forest, and The University of Montana. BEMRP is a unique project that is improving the understanding of the current and historical relationships among human activity and the forest landscape of the Bitterroot Valley.

This project is occurring within the context of a reevaluation of natural resource management and stewardship. The current analysis of natural resources is generally labeled "Ecosystem Management" (EM). Within EM there is a general desire to improve the connection between the management of natural resources and the people who are directly affect by that management (local communities) while fulfilling the managers obligation to regional, national, or even global purposes.

This emphasis presents two fundamental challenges to resource managers. First, they are challenged to integrate the complex array local desires and values into their planning and management. Second, they must communicate to the public their increasingly complex understanding of the natural systems they are managing. BEMRP heightened these challenges by infusing an uncommon amount of state-of-the-art scientific information into the process and by operating in a valley with a long history of active participation in forest management issues and a quickly changing demographic structure. From a research perspective, this presented a unique opportunity to study both public involvement and technology transfer in a situation that clearly defines a set of dynamics that are becoming pervasive in natural resource management throughout the country.

The original study plan (June 1994) for this project sought to address both public involvement and technology transfer. When BEMRP began the Stevensville district had recently completed an extensive public involvement process for it's Southwest subdistrict (Stevi-SW). Having experienced satisfaction with the results of going beyond the call of duty in public involvement, they were preparing to be even more experimental in the public involvement process of the Stevensville West Central (Stevi-WC) subdistrict that would coincide with this research project. The Stevi-WC process was then viewed as a precursor to a planning process for the larger Northern Georegion of the Stevensville district. Our

desire was to document as participant observers the activities of Stevi-WC with the intention of providing input to the structure of the Northern Georegion public involvement process.

The scientific involvement in BEMRP presented a unique opportunity to evaluate the success of a variety of technology transfer techniques that ranged from scientific seminars on philosophical issues (e.g., EM) or existing conditions on the landscape, to field trips, interactive picnics, and public meetings, to demonstrations of advanced technology including linear programs and optimization models, stochastic forecasting models, geographic information systems and computer generated visualizations. The investment of human and fiscal resources in these tools warrants the evaluation of which methods work best for which people. This is especially critical because most EM planning processes will be unable to bring such a range of resources into a planning process.

The Evolution of Project Objectives

This report documents the progress made during two phases of this joint venture. Each phase had specific objectives that were sometimes changed because of the timing of the Stevi-SW planning process, changes in the direction BEMRP was going, or the fiscal recession of FY 1996.

The first phase of the research set out to address four objectives. The completion of these objectives would provide a framework for subsequent research. The following narrative addresses the progress made on each of those objectives during 1994-1995.

Objective A. *Identify appropriate content and processes to use in the in evaluating the success of the BEMRP project in dealing with public participation.*

At the onset of this project, there was considerable scientific interest in the development of a round table or "consensus building" public involvement process (reflected in the name of this project). It soon became apparent, however, that the management aspect of BEMRP could not support this type of process, primarily for reasons related to the emerging use of the Federal Advisory Committee Act (FACA). Rather, managers of the BNF adopted a process in which management and representatives of various public interests, with the assistance of a professional facilitator, shared information and articulated goals for the Stevi

WC planning unit. The changing legal and political context of forest planning suggests that this type of process is the most likely to follow for the remainder of the BEMRP process. Thus, it was recommended at the end of this phase that the name of this project be amended to "Estimating the Effectiveness of Public Involvement and Technology Transfer in the Bitterroot Valley".

The primary intention of this objective was to evaluate the type of process used on the Stevensville West Central and Stevensville SW planning units to assess whether the process had been responsive to the stated desires of the public. It is also of interest to determine the extent public participants are learning about and accepting the notions of ecosystem management that are driving the management planning from participating in the process. It was decided by the Human Dimension (HD) committee that it would be appropriate for Katie Guthrie to begin a review of the Stevi-SW and Stevi-WC files to evaluate these issues and develop for phase two of the project a chronology of all communication related to each process and compare and contrast the evaluations of each. Upon completion of this review, focus groups were to be held with interest groups that have participated to gain their perspective on our analysis. During those focus group meetings, the relative value of the different types of interaction that have been used will be evaluated. Since we did not end up hiring Katie onto this project until May of 1995, the focus and time frame for this objective were changed. It was decided that the method for evaluation would be changed from focus groups to personal interviews and that the evaluation would be moved to the third phase of the research and be used as a Master's thesis project for Katie Guthrie.

Objective B. Develop an evaluation tool that is theoretically grounded and can be used at multiple scales, including local and valley wide scales.

The research agenda had shifted and moved the need for this objective into later years of the project. Since we were unsure of the type of process that will be proposed, or ultimately embraced by the BNF managers, it was difficult to define what we would be evaluating. As it turns out the next phase of the project still remains undefined.

Objective C. Identify opportunities to use computer visualization technology as a tool for information transfer between the scientific community and interested publics.

Rick Pukis began work on ecological aesthetics. Part of that work used computer technology to simulate the temporal change at Lick Creek with the use of Steve Arno's photo records. Rick will also simulate future within-stand appearance based on the models developed by Kevin O'Hara. Rick has since completed this portion of the project but additional support for computer simulations was eliminated during budget shortfalls. Rick's Masters thesis will amend this report when final revisions are made in August of 1996.

Objective D. Document interaction between the public and managers or scientists during FY 94 on high quality video tape.

This objective was met in full. Rick Pukis documented all public meetings and field trips for the Stevi WC planning process on video tape. He is currently producing a videotape on the Public Involvement component of BEMRP.

Objectives for Phase Two

At the time of developing these objectives the human dimensions research component of had evolved into a study of the interaction of two primary components; public involvement and technology transfer. Steve McCool joined the project to focus on the study of Public Involvement and Wayne Freimund was to focus on the study of technology transfer.

The objectives for phase two were:

- 1. To complete the evaluation of the Stevi-SW and Stevi-WC planning processes.
- 2. Assess the general public's perception of the role of tourism in the Bitterroot Valley.
- 3. Conduct a comparative analysis of the opinions of public involvement participants and managers regarding the role of tourism in the Bitterroot Valley.
- 4. Complete evaluation of potential social information sources for their relevancy to the northern Bitterroot Geographic area.

- 5. Begin drafting human dimensions planning prototype for the Northern Bitterroot Geographic area.
- 6. Develop animation of the appearance of the Stevensville Southwest Planning unit from pre-existing conditions through future planning scenarios.

A turn of fiscal events¹ removed the ability to complete all of these objectives. Objectives 1,2,4 and the ecological aesthetics work of Rick Pukis were completed during this phase. Objectives one and three were directly supported by BEMRP money. The work on ecological aesthetics was given generous in kind support in the way of time and expertise by the managers, scientist and public participants in BEMRP. The work on tourism and attitudes toward forest management was supported by the UM School of Forestry and the Institute for Tourism and Recreation Research as a contribution to the BEMRP process.

Organization of the Final Report

This report is organized into three subsequent chapters that each address an objective for this project. Chapter One provides a chronology of the public involvement efforts made in the Stevensville Southwest and West Central planning processes. Chapter Two provides an analysis of how qualitative and quantitative research methods can complement one another in providing useful information on public values to managers involved in EM projects. The third chapter provides an analysis of public opinion about tourism in the Bitterroot Valley and its relationship to the management of the Bitterroot National Forest. Each of these papers will useful to the thorough evaluation of success in public involvement on the Stevensville district that is serving as the topic of Katie Guthrie's masters thesis and phase three of this project.

¹ see Clarification of events (Carlson, 1996, Appendix A)

Appendix A

Clarification of Events

Clarification of events influencing the conduct of INT-RJVA-94930 "Effects of round table public process and technology transfer on perceptions of the public toward public involvement and ecosystem management."

- 1. Early in 1995 (Jan.-May or so) the HD group worked with Wayne Freimund in developing Phase 2 research direction for the social/public aspects of BEMRP. Early indications were that funding of \$40-50m (Fiscal Year 1995 money...Oct. 1, 1994-Sept. 30, 1995) would be available for an amendment to the existing RJVA for the period July 1, 1995 June 30, 1996. (Money appropriated in a given FY can be obligated beyond that FY via RJVA's, contracts, etc.). Wayne submitted a proposal expecting full funding.
- During spring, 1995, the U.S. Congress voted to rescird some of the FY 1995 funding. BEMRP was affected. As a result, there was only \$10,000 available for Amendment #2, instead of the \$40,000.
- 3. Amendment #2 for Phase 2 was completed and signed by INT on 7/14/95 and by UM on 7/19/95. The budget was \$10,000 from BEMRP. However, all the objectives for the \$40,000 were included in the Amendment. Why? It just slipped through that way.
- 4. This put Wayne in a difficult position. He was obligated through the Amendment to complete \$40,000 worth of work for \$10,000. A good deal for the FS! He had Katie Guthrie and Rick Pukis on board with no way to pay them through the end of the period covered by Amendment #2. He also had to pack off the visualization work.
- 5. To help, I hired Katie and Rick on temporary appointments to carry them through June 30, 1996. The cost of this will be about \$14,000.
- 6. The bottom line is that Wayne will achieve some of the objectives for Amendment #2, but not all of them. I will take whatever steps are necessary to make sure that Wayne is not held responsible for completing all the objectives.
- 7. I plan to terminate INT-RJVA-94930 as of June 30, 1996. Wayne will need to submit a final report documenting accomplishments problems, etc.
- 8. We will construct a new RJVA to deal with the research component of the BEMRP HD effort. This RJVA will cover the final two years of this program...July 1, 1996 through June 30, 1998. There is about \$35,000 of FY 96 money available, and \$40,000 planned for FY 97.

Chapter One

Public Involvement with Ecosystem Management on the Stevensville District of the Bitterroot National Forest

Kathleen Guthrie & Wayne A. Freimund

August, 1996

Public Involvement with Ecosystem Management on the Stevensville District of the Bitterroot National Forest

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The Emergence of Ecosystem Management

In June, 1992, the USDA Forest Service (USFS) Chief Dale Robertson, announced the marriage of the Agency's *New Perspectives* program with an ecosystem-based approach to forest management. The result, Ecosystem Management (EM), has evolved into a policy that demonstrates a broadening of the Forest Service's commodity orientation and highlights the "importance of improved public participation to the success of the ecosystems approach". As a management framework, ecosystem management enables Forest Service managers to respond in a more integrated and meaningful way to the concerns of the public, existing legislation and mandates, and changing scientific information.

Effectively incorporating public participation in natural resource management continues to be a challenge for federal agencies. Managing public lands in an economically feasible, environmentally sustainable and socially acceptable manner is a challenge, but, "The ability to maintain a healthy environment and economy, integrate scientific knowledge, and pursue a participatory democracy lies at the heart of achieving a sustainable ecosystem". While scientific and expert knowledge contributes to the challenge of implementing ecosystem-based management, fully integrating the public into the decision making process is vital to successful long-term ecosystem management. McCoy et al. go on to say that, it (is) important to infuse technical data with public reality, public values and creative responses". ³

The Bitterroot National Forest, the Intermountain Research Station and the University of Montana are part of a multidisciplinary cooperative effort to implement EM practices at a landscape level.

³ (ibid:12)

¹ "Improving Public Participation in Resource Management Decision Processes", Science & Policy Assoc, Washington, DC. October 1994, p.2

² McCoy, K.Lynn, Edwin E. Krumpe and Paul Cowles. (No Date.) "The Principles and Processes of Public Involvement: A State-of-the-Art Synthesis for Agencies Ventureing Into Ecosystem Management". Eastside Ecosystem Management Team, p. 3.

The main objective of the Bitterroot Ecosystem Management Research Project (BEMRP) is, "To determine landscape-level influences of vegetation management on multiple resource outputs and values in an altered Rocky Mountain ecosystem, and to demonstrate to the public the feasibility of landscape-level rehabilitation management". BEMRP has six components: vegetation, animals, aquatics/watersheds, landscape ecology, landscape application and human dimensions. The Stevensville Ranger District on the Bitterroot National Forest is part of this effort to implement ecosystem-based management practices with special emphasis on public involvement. The Human Dimensions committee is focusing its research efforts on public involvement in the Stevensville District. The fundamental challenge within this project is in developing a management strategies that sustain productive ecosystems and meet public needs, while trying to build trust and cooperation between the public and the Forest Service.

Purpose of Paper

During the past four years, managers of the Bitterroot National Forest have expanded their public participation efforts in the Stevensville Southwest and West Central subdistricts (See Appendices 2,B and 2,C). This increased attention to public participation is congruent with EM philosophy and it is believed by many managers and public participants alike that the additional efforts by the Stevensville Ranger District officers have enhanced their understanding of the human dimensions of the Bitterroot Valley. Using an adaptive management format, different public involvement processes were used on the Stevensville Southwest (Stevi-SW) and Stevensville West Central (Stevi WC) subdistricts. This paper presents a comparative analysis of the public involvement process for those two analysis areas in the Bitterroot National Forest.

Background on the Bitterroot National Forest and the Bitterroot Valley

The Bitterroot Valley has been a place where residents have depended heavily on natural resources for their livelihood. Ranching, farming and logging are examples of how the Valley's resources have been utilized to support people. The area also has a long history of population transformation. Essentially, patterns of transition have influenced the Valley's resource base since the area first settled in the 1800's. Large demographic changes, including population growth and settlement patterns have taken place in the last several decades. While such human activities affect the natural ecosystems, they also reflect changes in the social structure of the Valley.

⁴ Bitterroot Ecosystem Management Research Proposal, Fiscal Year 1994 & 1995, p.1.

Aside from the sheer numbers of people moving in to the Valley, there has been, ". . .an influx of people who view resources as something to be used for aesthetic purposes, (for example) viewing wildlife and scenic driving"⁵. This has created a tremendously diverse population with varying ideas of how the Valley's resources should be managed. Today's mixture of ranchers, commuters, retirees and a wide variety of other people has heightened dissension on the issue of natural resource management in the Valley. Some citizen groups support total preservation of the landscape, while others believe that the resources should be fully utilized. Supporters of conservation or "wise use" also have a voice that is heard in the Valley.

Management efforts must be flexible and adaptive to both meet the needs of the local people and capabilities of the Valley's National resource base and purpose. It is anticipated that with the implementation of ecosystem management, the ability to reconcile conflicts between the public and the Forest Service will be developed through public involvement efforts. "Moving to an ecological approach to management is a response to changing public values and to increased understanding about how ecological systems work. People need and want a wider array of uses, values, products and services from the land now than in the past".

This paper will begin with description of the Stevensville Southwest public involvement efforts. A thorough description of the involvement process is synthesized from public meeting notes and meeting videos. Likewise, the public involvement process for West Central analysis area will be described in detail. All process descriptions, including the chronology (Appendix 1A) are based on public meeting notes, public meeting videos and consultations with Stevensville District officers.

Stevensville Southwest Landscape Analysis

The Stevensville Southwest analysis area covers approximately 60,000 acres of the Bitterroot National Forest. It is bound on the north by Bear Creek, the south by Blodgett Creek, the forest boundary on the east and the Idaho state line/Selway-Bitterroot Wilderness boundary to the west. Approximately 60 percent of the analysis area is designated Wilderness. While the Southwest analysis area represents only a small portion of the Bitterroot Range, it is an important component of the greater northern Rocky Mountain ecosystem.

⁵ New Perspectives Case Study Outline, Stevensville Southwest, undated, page 1

⁶ Questions & Answers to Ecosystem Management, August 1993, p.1 USDA-FS Memo, Washington Office.

On September 14, 1992, an open house was held at the Forest Supervisor's office in Hamilton, Montana. While this event was not the first step the Forest Service made toward building a relationship with the citizens of the Bitterroot Valley, it was the first since 1988. The open house marked the beginning of ecosystem-based management in the Bitterroot Valley. Stevensville Southwest was the first analysis area where the concepts of ecosystem management were incorporated/applied. The primary objective of the open house was to explain how ecosystem management would be applied in the Stevensville Southwest landscape analysis area, and to inform participants how they could become part of the decision-making process. The Stevensville Ranger District wanted to develop a partnership with the public by actively involving them in resource management decisions. At the open house, the District Ranger explained what actions and projects were being proposed in Stevensville Southwest and emphasized that social and economic concerns, as defined by the public, would be addressed throughout the process. The process was open to anyone interested in the management of resources in Stevi SW, the open house technique failed to bring out the quantity or quality of public-agency interaction that was desired by the District.

The District reevaluated their public involvement techniques and decided that a different approach was needed in order to bring public participants into the process and give them greater ownership in public land management decisions. An expanded public involvement process officially began on December 8, 1992, and was guided by four main objectives.

Objectives for the Southwest Open Working Group Process

- 1. Gain public awareness of the concepts of ecosystem management and understand the factors which have resulted in the existing condition
- 2. Share issues, concerns and personal values that individuals have for the area
- 3. Develop a desired condition for the resources in the area
- 4. Evaluate management practices needed to move toward the desired condition

The Southwest Public Participation Process

After the open house event introduced the notion of participation to residents, three meetings were held to establish a public involvement framework. A core group of approximately 14 regular participants formed a public working group and interacted with the Forest Service's Interdisciplinary Team (ID team) in public meetings. Four objectives for public involvement guided

⁷ Public Meeting Notes, SSW, September 29, 1992, page 1.

the process. They included:

- 1. Assist in developing a desired condition statement which incorporates the social, economic and ecological values of the analysis area.
- 2. Assist in identifying management practices needed to move toward the desired condition.
- 3. Assist in identifying the issues surrounding site specific project proposals.⁹
- 4. Evaluate alternatives for implementing proposed actions.

Together, the public working group and ID team identified and prioritized concerns, opportunities, and management alternatives. These cooperative efforts resulted in an Integrated Resource and Ecosystem Analysis (IRA).

Presentations given by specialists at public meetings helped the public working group and other members of the public, gain a working knowledge of the existing conditions. When the discussions about desired resource conditions were initiated at public meetings, there was high variability in the working group's opinions, values and concerns. These preliminary discussions became an important part of the open working group process as they provided an opportunity for the public to voice their opinions. Over the course of three to four meetings, some common goals emerged. The public working group then met with the ID team and drafted desired future condition (DFC) statements for the major components of the forest, including wildlife, fire, fish, watershed, recreation, transportation, visual quality, wilderness, economics, public involvement and cultural resources/heritage. The joint effort to reach general agreement on the DFC statements. The ID team drafted the statements which were then refined with the help of public participants.

Stevensville Southwest Desired Future Condition Statement

While statements for each specific resource were developed, the following umbrella statement addressed the future condition of all the resources within the Southwest analysis area.

The landscape provides for diverse social and economic use while being managed within it's limitations and ranges of natural variability. The ecosystem is diverse, complex, resilient and productive. Management activities maintain or restore the diversity (composition, structure and function) of terrestrial and aquatic communities. The viability of uncommon species and communities (such as wetlands, riparian areas, old growth plant communities) is also maintained or restored. Appropriate management actions reduce the negative impacts of undesired non-native species. Socially and economically desired non-native species and communities are maintained.¹⁰

⁹ Objectives three and four were developed in accordance with the National Environmental Policy Act of 1969.

¹⁰ Public Meeting Notes, SSW, February 11, 1993

Next, the ID team prioritized management needs and opportunities, and formulated proposed actions. The ID team worked closely with the public working group to develop management proposals that met ecosystem management goals. The Southwest proposals included a combination of approaches to restore ecological processes. The use of prescribed fire to restore plant communities, reduce fuel-loading and large fire potential, and silviculture treatments (group selection, thinning and shelterwood harvesting) were incorporated in the proposed actions. The focus of public input now shifted to concerns and issues related to proposed site specific actions. This marked the beginning of the environmental analysis as required by the National Environmental Policy Act (1969). Using feedback from the public on the proposals, the ID team developed a set of alternatives. Public input was again solicited and a selected alternative was released in a draft Environmental Assessment (EA) document. The document was available for public review and comments were received for 30 days. In June, 1993, a final Environmental Assessment that responded to comments received from the public was released with a Decision Notice. The Implementation plan for Stevensville Southwest represented a comprehensive strategy for EM. An appeal was filed in July, 1993 and the Forest Service responded by initiating a supplemental analysis which addressed the issues raised in the appeal. The supplemental analysis was completed in July, 1994. No further appeals were filed for the Southwest Landscape analysis area.

Stevensville West Central Landscape Analysis

The next resource analysis area to be analyzed was Stevensville West Central. On the north, Stevi WC is bound by the ridge between Sharro and Silverthorn Creeks to Saint Mary's Peak then the ridge between Kootenai and Big Creeks. The southern boundaries include the ridge north between Bear and Gash Creeks until Gash Point, then the ridge between Bear and Sweathouse Creeks. It was decided that for this 40,000 acre landscape, an expanded public involvement effort was needed.

As mentioned earlier, Stevi WC is the location of BEMRP's human dimension research efforts. The expanded public involvement effort has provided a tremendous research opportunity for the Human Dimensions committee. The committee's objective, to emphasize human and social considerations while searching for a way to bring all stakeholders together and reduce polarization is being pursued in the Stevi WC analysis area.

Although the Stevi SW process had some unique qualities, simply repeating the same process would not achieve the District's public involvement goals to include a greater of diversity of participants and achieve a higher level of public-agency interaction. To further facilitate the successful implementation of ecosystem-based management principles and link the local ecology with diverse human values, a innovative public involvement process was needed. A new way of involving the public in the decision-making process began with asking thepublic to help develop a participation strategy. The purpose of this was to clarify the public's role and the agencies obligations. In this unique start to public involvement Setvi-WC managers had three objectives:

- 1. Develop ways to effectively bring all partners to the planning process.
- 2. Establish roles, ground rules and guidelines for public involvement.
- 3. Review the Forest Plan objectives for Stevensville West Central

The public involvement strategy was implemented through public meetings, individual meetings, written requests for information and field trips. The variety of forums provided ample opportunity to raise the level of public involvement. This expanded public involvement effort also provided an opportunity for agency interaction and research in land management planning.

The West Central Public Participation Process

To help the public participate in a more meaningful way, the District decided that it would be helpful to provide some background information on ecosystem-based management. The Regional Forester, Hal Salwasser, was invited to give a presentation at a public meeting on the concepts and principles of Ecosystem management. He described how people fit into ecosystems and how an ecological approach to management can help meet the growing demand for resource use while maintaining the health of the resource. He also discussed the application of ecosystem management to research projects on the Bitterroot National Forest. This was followed by other presentations by resource specialists and researchers who emphasized the biological and physical conditions of Stevi WC. (See appendix 2A for complete list of presenters and topics.) These presentations served to help the public gain an understanding of existing resource conditions, as well as understand the framework the Forest Service was going to use to manage those resources.

Defining goal statements for resources conditions was the next task. It began with draft goal statements for each resource (wildlife, watershed, recreation, etc.). This became a wearisome process for all involved. Developing goal statements for each resource in a public meeting forum caused frustration because there was a great diversity of interests represented and it required a great

amount of time to adequately address all of those interests. As a result, the task of developing draft goal statements was shifted to the ID team. The team developed statements in-house and then presented them at public meetings where input could be incorporated. To increase the efficiency of the participation process while ensuring public perspectives were included, a neutral facilitator was used to organize and run the meetings. The facilitator also played an important role in establishing two-way communication between the public and Forest Service.

The ID team spent the summer of 1995 developing management proposals that responded to the goal statements developed in the preceding spring's facilitated process. These proposals were presented to the public and discussed at facilitated public meetings. In addition, field trips were sponsored by the Forest Service and provided unique opportunities to discuss the proposed activities on-the-ground. The District viewed this point in the process as critical. It was important that the public voice any concerns related to the proposed management actions as the next step was to develop a set of site-specific proposed actions. The ID team developed a set of proposed actions, which they then presented to the public. At a public meeting, the District Ranger highlighted the proposed action and resource specialists presented biophysical details of alternatives. Public input was again solicited on all of the alternatives. It was then up to the ID team to incorporate the feedback in a draft Environmental Assessment document. It is estimated that this draft document will be available for public review in July, 1996. After a 30 day comment period, a final Environmental Assessment that responds to public comments received will be released with a Decision Notice.

Relative Strengths of the Processes

While a departure from previous public involvement strategies, the Stevi-SW process which consisted of 13 public meetings and two field trips was still structured in a information dissemination format. Uniformed USFS staff coordinated a series of meeting in which they focused on "educating" the public on the ways of Ecosystem Management. Meetings were often at Forest Service facilities in which participants sat in rows and a technical expert imparted information in presentation mode. Advertising of the meeting was done in a traditional way of posting notices in news papers and at gathering places within the valley. Time for dialog among participants was limited in the majority of the meetings and the field trips were scheduled near the end of the process.

Even though the plan was appealed, the process was helped in developing a baseline of common understanding about the Forest Service's intentions and rationale for implementing Ecosystem

Management. It also began the process of improving relationships with the participating public. Although the Southwest process was appealed, the beginning of a relationship was developed within it. Many of the same individuals returned for the West Central process. Preliminary indications are that the relationships have grown and that West Central has been the beneficiary of the Southwest efforts.

The design of the West Central process included a more purposeful effort to include the public in ways that would allow a two way communication atmosphere to emerge. The process was designed to meet the needs of more people by offering more opportunities for participation at more flexible times of the day and week in a neutral location (usually a community church). The West Central meetings involved a non forest service facilitator who eventually structured the group into a circle to facilitate more direct dialog among participants. All meetings were started with introductions and all participants wore name tags. The intent of these changes was to create a professional yet casual atmosphere in which issues could be presented and discussed. The facilitator attempted to advance dialog while taking time to ensure each person's point was validated and recorded. This was a difficult task in that the process sometimes seemed to be going too slow for some and too fast for others. When the process was going slowly, those who were charged with thinking about the larger time scale of producing a plan were taxed in their patience. When it was going too fast, some participants remarked that the facilitator was conceding to the demands of the agency's agenda. Facilitation of this type of effort is truly an art in gaining the confidence of a diverse group of people and interests.

The West Central process included 33 gatherings over the course of two years and one very taxing fire season that delayed several of the meetings. Field trips began within the first six months of the process and occurred intermittently throughout the remaining time. The field trips were well received by public participants and forest Service staff alike. It appeared that time together on the land afforded the realization of the groups common interest in stewardship for the resources. Field trips were particularly successful in improving a common understanding of the effect of potential management actions. They were always well staffed and allowed opportunities for participants to ask questions of managers in a one on one style.

Research presentations brought an added dimension to the processes. At times they seemed difficult to schedule in a way that fit logically into the over all process. These presentations were occasionally very technical or somewhat abstract for some of the participants. While some participants seemed to disagree with the investment in research and modeling, others were reinforced with the degree of energy being put into trying to make decisions in the most informed

way possible. The research presentations were very helpful in pointing out the degree of social and ecological complexity that is inherent in the implementation of Ecosystem Management on the ground.

The expense of these public involvement strategies was not recorded but must have been substantially higher than traditional approaches. The West Central process demanded an enormous commitment by the public and the district staff. Some participants dropped out of the working group completely or for extended periods of time. Perceptions of the success of this process are being studied in the third phase of the BMERP research. Given the investment made, it is critical that the results on the ground live up to the dedication that has been applied within these groups.

Appendix 1 A

Chronology of Stevensville Southwest and West Central Planning Processes

Public Involvement Chronology for Stevensville Southwest

- September 14, 1992 (16) Open House: Presentations by 16 resource specialists

 December 8, 1992 Public meeting: Orientation to working group process, overview of
 - objectives and ground rules and a presentation by Janet Johnson on ecosystem management
- December 9, 1992 Public meeting: Presentations on existing resource conditions (vegetation, fire, wildlife, water/fisheries, recreation, wilderness and cultural resources by Janet Johnson, Cathy Stewart, Brooke Thompson and Leslie Anderson
- January 6, 1993 Public meeting: Continue presentations and discussions on existing conditions (wildlife, water/fisheries, recreaion, Wilderness, visual quality, transporation/travel and social/economic)
- January 13, 1993 Public meeting: Discuss concerns, opportunities and priorities for managment of the analysis area
- January 26, 1993 Public meeting: Interdisciplinary team presented draft DFC statements
- February 1, 1993 Public meeting: Develop DFC statements with working group
- February 17, 1993 Public meeting: Review/discuss proposed management actions
- February 24, 1993 Public meeting: Complete review/discussion of proposed management actions and develop an implementation schedule
- March 18, 1993 (15) Official start of NEPA at SO: review results of IREA, present/discuss proposed actions and gather public comment on proposals
- May 10 & 19 Individual meetings w/ FOB & Energetechs
- June 9, 1993 Field trip
- June 28, 1993(18) Public meeting: Discussion of Preferred
- July 6, 1993 (7) Field trip: to view site where proposed treatments under preferred alternative would occur
- July 12, 1993 Final Environmental Assessment released

Involvement Chronology for Stevensville West Central

January 10, 1994 - Public involvement strategy meeting

February 9, 1994 (9) - Public meeting for WC/BEMRP

March 1, 1994 (17) - Public meeting: develop ways to bring all partners into process

March 24, 1994 (21) - Facilitated public meeting: identify purpose, concerns and interests

of public participants. Also decided on working group name - Ecosystem Advisory Group

** When available, numbers in ()'s represent the number of participants at that meeting

- April 7, 1994 Public meeting
- April 13, 1994 Public meeting for WC/BEMRP Communication Plan
- April 18, 1994 (24) Presentation on Ecosystem management by Hal Salwasser
- April 28, 1994 (22) Public meeting: Overview of analysis area including Forest Plan emphasis and traditional uses of Salish people
- May 2, 1994 (22) Public meeting for WC/BEMRP
- May 12, 1994 Presentation on existing conditions for recreation and Wilderness resources by Dave Silvieus
- May 19, 1994 (28) Presentation on fire ecology and research efforts on elk and small carnivores by Jack Lyon & Steve Arno
- May 21, 1994 (7) Field trip to Smith Creek & St. Mary's to view high elevation white bark pine and lodgepole ecosystems and watershed management
- May 26, 1994 (7) Field trip to Lick Creek
- June 9, 1994 (13) Public meeting: an opportunity for participants to offer suggestions and make changes to the public involvement process, also overview of field trips and beginning of discussion on economic issues
- June 30, 1994 (11) Presentation on Landscape Ecology by Bob Pfister
- July 7, 1994 (9) Presentation on SIMPPLE by Jim Chew (Simulated Patterns and Processes on Landscapes)
- September 8, 1994 (6) Presentation on MAGIS by Greg Jones (Multiple-resource Analysis Geographic Information Systems)
- September 29, 1994 Presentation on GIS by Ken Wall
- October 20, 1994 Public meeting: Begin developing draft goal statements
- November 17, 1994 Public meeting: Beginning to review draft statements for 10 resource areas
- November 28, 1994 (8) Public meeting: Continue to develop draft goal statements for economic, recreational, transportation/travel and heritage/cultural resources
- December 8, 1994 Presentation on Social Assessment by Janie Thompson
- December 12, 1994 (14) Public meeting: Continue to develop draft goal statement for roadless areas
- January 12, 1995 (17) Public meeting: Finalize goal statements for air, visual quality, economics, heritage/culture, recreational, transportation/travel resources and review draft statements for biodiversity, fire management and roadless areas

February 14, 1995 (9) - Public meeting: Finalize goal statements for biodiversity (vegetation, wildlife and aquatics), fire mangement and roadless areas February 21, 1995 Presentation on SIMPPLLE outputs for Stevi WC by Jim Chew ??March

April 4, 1995 (12) - Process Pot Luck: Discuss public involvement process to date including whether public and agency needs have been met, followed by a round-robin discussion on how to improve the process

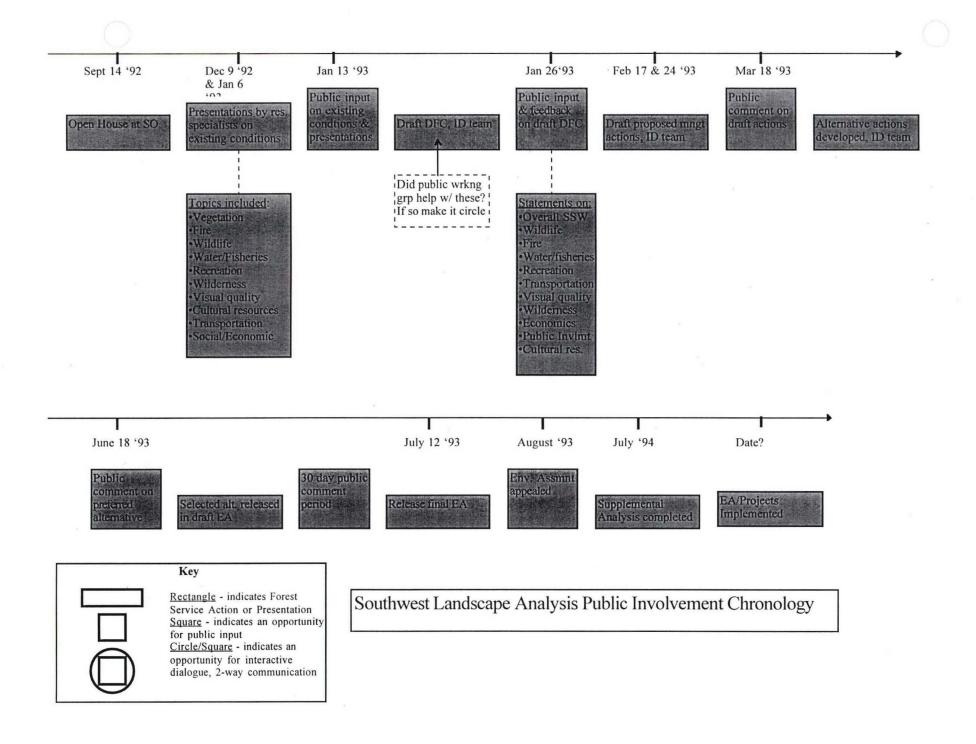
May 10, 1995 - Field trip to Larry Creek

July 15, 1995 - Field trip to Lick Creek

September 23, 1995 - Field Trip(Smith/Big/McCalla/Gash/Sweathouse Creeks)

December 12, 1995 - Public meeting: Presentation of proposed action; beginning of NEPA analysis and documentation

January 31, 1996 (15) -Public meeting: Review of alternatives



West Central Landscape Analysis Public Involvement Chronology Jan 10'94 Apr '94 -→ Sept '94 Nov 7 '94 Feb 14 '95 Drft goal statements dvlpd by ID team Develop public Implement public Topical based on public involvement Presentations on Presentations involvement strategy meetings to draft existing conditions & agency public & agency public & agency Resource Areas Topics included: Included request for Objectives •Wildlife •Ecosystem Mngt •Involve all partners •Forest Plan written input on public values and ·Watershed/Fisheries ·Computer Modeling ·Wildlife:elk ·Social Assessment •Review objectives ·Water Quality & for Stevi WC ·Visual Quality •MAGIS •Recreation •Wilderness •GIS ·Fire ecology ·Heritage/Culture ·Biodiversity Summer '95 July 15 Dec 12 '95 Jan 31 '96 '96 Field trips & Develop proposed Public 30 day mngt actions, ID Release Selected alt Develop & Final EA with comment & agecny period team Set of alternatives Proposed Alt. presented to public, released in draft EA ID team Field trips included: •Lick Creek ·Smith, Big,

McCalla, Gash, and Sweathouse Creeks

Chapter Two

Integrating Information Sources to Improve the Integration of Public Values Into
Ecosystem Management and Planning

Kathleen Guthrie & Wayne A. Freimund

August, 1996

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Introduction

Public values for natural resources have changed in recent years. Ecosystem-based management is a paradigm that is enabling federal agencies to incorporate these shifts. "In addition to it's emphasis on integrated, holistic science, ecosystem management places a strong emphasis on human/environment interactions" (Cortner, 1996:167). The human dimension is not a newly recognized attribute of natural resource management, but it is being viewed in a new light under ecosystem management. Williams (1995) considers the paradigm a shift in the focus of management from commodities to communities. In the past, the purpose of management practices was, "to commodify the meaning of the landscape and concentrate on the spatial and temporal distribution of resource commodities" (Williams, 1995:5). While commodities remain an important component of natural resource management, the focus is being dispersed. Ecosystem management represents a change to what has been called, "a new kind of life science, one that treats the biosocial reality of human beings as a serious part of its approach towards ecosystem management" (Machlis, 1995:1). In other words, the human dimension is being recognized and given the study it requires. While this is a positive, progressive step, the challenge of understanding the social environment in the context of biophysical and economic environments remains.

The human dimension of ecosystem management can be difficult to study because it is so dynamic. Broadening the definitions of human interactions with natural resources creates new problems in communicating information needs. "Public needs and values are not absolute or ever fully defined" (Wondolleck & Yaffee, 1994:2). Advancing public understanding of forest resource issues and facilitating public involvement in the decision making process is a vital part of the implementation of ecosystem management.

Resource managers are challenged to understand the dynamics of the human dimension of ecosystem management. Information on public opinion that managers receive is often gained through different means and from potentially different components of the

population. "The issue for resource managers is not so much knowing how meaning in general is created, negotiated, or lost (the work of social scientists), but knowing what meanings various individuals, groups, or cultures assign to what pieces of the landscape, and understanding the extent to which people agree or disagree on these meanings" (Williams, 1995:11). It is important that a resource manager understand how representative the information gained through public involvement or social assessments is. "Because of the recent changes in demographics, we need better ways to determine what the public will need and want from the forest "(BEMRP Master Study Plan, 1994:3), but it is difficult to manage natural resources with limited social information. To improve the quality and quantity of information on public needs and values, efforts to solicit public opinions need to be focused and integrative. "...the public involvement challenge of the future is not simply more involvement or better techniques, rather the challenge is to address the changing roles of the major participants in public involvement activities" (Cortner, 1996:167).

Similar to many planning processes, the development of management plans for the Stevensville district of the Bitterroot National Forest has needed to occur with limited information about the publics desires and opinions about the future of the National forest. It is not uncommon to desire more information whenever decisions are being made. Although managers have been assertively engaged in public involvement (see Chapter 1 of this report), there is often question of who is really represented by the people who participate in these efforts. Specifically, how far can the opinions expressed in public meeting be generalized to a larger public population? And, to what extent are they types of data being collected on public opinion applicable to these central questions?

The objective of this paper is to assess the relative value of two information sources on the understanding of public opinion of forest management in the Bitterroot Valley. Three fundamental issues were chosen to be evaluated in this context. They are: 1) the utilization of forest resources, 2) the use of prescribed fire as a management tool, and 3) the credibility of scientists and experts.

This paper begins with a general discussion of two methods of soliciting public opinion - personal interviews and self-administered mail surveys. These methods have recently been used in reference to the management of the BNF. The application of these two methods to the human dimensions of the Bitterroot Valley will be described, as will a characterization of the sample populations to which they were applied.

Methods of Soliciting Public Opinion

Conducting public opinion surveys provides an opportunity to collect valuable social information that describes a selected social environment. ". . . as a source of feedback on public attitudes and a corrective to other participatory mechanisms that incorporate more bias, citizen surveys can be a valuable way of informing policy makers" (Fiorino, 1990:234). There are many kinds of descriptive research methodologies. "A descriptive study describes and interprets what is. It is concerned with conditions or relationships that exist, opinions that are held, processes that are going on, effects that are evident, or trends that are developing" (Kraus & Allen, 1987:55). Naturally, some techniques are better suited to certain populations, type of data to be collected or functional structures, such as time frames and budgets. It is important that the method selected for a particular study is suited to the scale and scope of the study, and is capable of carrying out the research objectives.

Personal Interviews

Personal interviews are a common methodology used to collect qualitative data. Large amounts of social data can be compiled very quickly with an interview process (Marshall & Rossman, 1990). Some researchers believe that "personal interviews are the best way to ask sensitive questions. Interviewers have an opportunity to build rapport and to establish the kind of trust that is needed for respondents to report potentially sensitive information" (Fowler, 1989:65). More detailed responses may be elicited if a researcher is able to answer respondents' questions at the time of the interview. If the interview has an open-response format, where acceptable responses are not provided, the result may be unanticipated answers that more closely reflect the views of the respondents. The opportunity for interviewees to respond to questions or statements in their own words is a great benefit. A personal interview session can turn into "a conversation with a purpose" (Marshall & Rossman, 1990:82). An interviewer administrated survey also allows for more complex instructions or sequences to be followed. Clearly, cooperation between both parties is essential to this type of methodology.

While interviews are a good way to enlist cooperation from most populations, the methodology can be refined to target certain populations. An example of this is elite interviewing. It is, "a specialized treatment of interviewing that focuses on a particular type of respondents. Elite people are considered to be the influential, the prominent and the well-informed people in an organization or community" (Marshall & Rossman, 1990: 94).

Within a community, opinion leaders are a form of elite's who can be surveyed for their perspective. "Valuable information can be gained from these respondents because of the positions they hold in social, political, financial or administrative realms" (ibid:94).

There are several ways to improve or maintain the quality of the interview survey data. One is by limiting the number of interviews an interviewer conducts throughout the study. Although procedures for training and supervising interviewers can vary widely across disciplines, standardization is one way to limit the influence of interviewers on respondents. Interviewers need ".. to be trained in how to administer a survey in order to avoid introducing important biases in the answers they obtain" (Fowler, 1989:14). Fowler goes on to discuss five aspects of interviewer behavior that can be standardized to improve the data by reducing what he calls "between interviewer variation"; the five aspects are: 1) the way the interviewer presents the study and the task, 2) the way he/she asks questions, 3) the way inadequate answers are probed, 4) the way answers are recorded and, 5) the way interpersonal aspects of the interview are handled (ibid.: 109). As an additional guideline, the interviewer should allow the interviewee to establish the structure of his or her responses. In fact, it is a fundamental assumption of qualitative research that, "...the participant's perspective on the social phenomenon of interest should unfold as the participant views it, not as the researcher views it" (Marshall & Rossman, 1990:82). This type of latitude for interviewees is a benefit of personal interviews that can be facilitated through an open-response question design. While personal interviews can provide unique data that is insightful and can be very helpful for some studies, there are some negative aspects to this method.

A qualitative study's transferability or its "external validity" to other settings is questionable (Marshall & Rossman, 1990:146). The ability to replicate a qualitative study like elite or opinion leader interviewing is limited by the dynamics of the people involved at a particular point in time. Volumes of data may be obtained through interviews, but such data may be difficult to manipulate (Marshall & Rossman, 1990:83), and interpret at a later date.

Another consideration for interview surveys is the amount of time and money required to complete the interviewing process so that the research objective is met. The amount of time required to complete a personal interview survey is virtually incalculable because there are many factors to consider including, sample size, detail of data desired and the availability of the interviewer and interviewees. Since the cost is related to the amount of time, the budget for a personal interview survey would be difficult to estimate.

Self-Administered Mail Survey

A self-administered mail survey is an example of a quantitative research methodology that can be used to measure public opinion on selected issues. Before sampling can take place, a sample frame needs to be established. A sample frame is comprised of all the members of a population being researched. Mail surveys frequently use systematic random sampling. In theory, a sample is selected randomly based some sort of system, for example every hundredth name in the telephone book after a random start or completely random telephone dialing. The key to a truly systematic random sample is the completeness of the sample frame. It is important that the sample frame is comprehensive because, "A sample's representation depends directly on the extent to which a sample frame contains all the members of the total population that the sample is intended to represent" (Babbie, 1995: 227). In other words, telephone surveys are limited to people with registered telephone numbers.

The economy of this particular methodology is clear. Mail surveys are quicker to implement than interview surveys and they can be conducted with a smaller research staff and facility (Fowler, 1988: 71). While personal interviews allow one-on-one interaction between the interviewer and the interviewee, some researchers prefer to use of surveys to collect social data on potentially sensitive issues because they allow the interviewee to remain anonymous. "Self-administered surveys are (also) more appropriate in dealing with especially sensitive issues if the surveys offer complete anonymity" (Babbie, 1995: 272). Survey data from a mail survey may be more complete because, "Respondents have time to give thoughtful answers, (and) to look up records or consult with others" (Fowler, 1988: 71).

The general design of a self-administered mail survey may be influential. "A well designed survey can assess individual beliefs as part of an overall set of values and attitudes, and measure the intensity as well as the direction of beliefs on issues" (Fiorino, 1990:234). Close-ended statements or questions are frequently part of the design of a mail survey. This is an advantage for self-administered mail surveys because close-ended questions, "provide a greater uniformity of responses and are more easily processed" (Babbie, 1995:142). The Likert scale is common way to incorporate a close-ended question structure. Likert scales typically have either response scales (0-5) or response indexes (strongly agree to strongly disagree and no opinion). The layout of the Likert scale uses space efficiently and enables respondents to complete a set of questions or statements quickly. But to be most effective, close-ended questions must be designed so that possible responses are both exhaustive and mutually-exclusive.

There are some draw backs to a self-administered mail survey. For example, the matrix-based format of questions that a Likert scale provides can lead to a pattern of responses in some respondents (agreeing with all of the statements, for example). This pattern is called a response set and it could be initiated if a set of statements begin with several questions that indicate a particular orientation. "This problem can be reduced somewhat by altering statements representing different orientations and by making all statements short and clear" (ibid:150).

Responses to mail surveys can be affected by the order of the statements or questions in another way. The appearance of one statement can influence the answers given for subsequent statements. "Although your cannot always avoid the effect of item order, try to estimate what that effect will be. Thus, you will be able to interpret results meaningfully" (Babbie, 1995: 151).

Public Opinion Information Available to the Bitterroot National Forest

Managers who are developing and implementing ecosystem management practices on the Bitterroot National Forest have access to both qualitative and quantitative data on public opinion about the management of the forest. The relative strengths of those information sources are offered here.

An Ethnographic Assessment of Bitterroot Valley Opinion Leaders

The Bitterroot Social Research Institute (BSRI) was contracted by the Northern Region of the USDA Forest Service in the fall of 1993 to conduct a social assessment of the Bitterroot Valley. "Social assessment is a method of data collection and analysis used to generate information about 1) social structure, 2) social processes, and 3) the social changes being wrought in given social structure(s) and process(es) by some form of intervention(s)" (Canton-Thompson, 1994a:1). A social assessment produces a document that can help forecast, monitor and evaluate changes in the social environment. While the main impetus for the social assessment was to discover public perception of fire, in particular, the role of management ignited prescribed fire, advancing the understanding of the human dimensions in the Bitterroot Valley was also a goal for the assessment.

A snowball sampling method was used to select sample of opinion leaders. This method is useful for conducting a social assessment because, "It directs field researchers to secure their interviewees by requesting initial interviewees to designate others they think should provide information and for what reasons. The same names begin appearing in

each new interviewee's recommendations and finally no new names are forthcoming so the researcher stops sampling" (ibid:2).

It is important to note that snowball sampling is not a random process. It is a directed process whereby the sample selection is based on the perception of who the opinion leaders are in a community. As a result, some valid opinion leaders who may lack popularity or recognition, may be over-looked. Opinion leaders typically are active citizens who have lived in the area for some time and are active in community affairs. As a result of using this method, people who have not lived in the area very long (i.e., "newcomers") or those who are less active or vocal in community affairs, are left out of the potential sample frame.

Theoretically, the sample frame for the assessment consisted of all residents who lived in nine communities of Ravalli County, including Florence, Stevensville, Victor, Corvallis, Pinesdale, Hamilton, Darby, West Fork and Sula. The sample frame was restricted to those residents who were also members of forest-related, forest-concerned public groups that exist in the Bitterroot Valley. From several hundred recommended names, 51 opinion leaders were selected and interviewed. Selection was based on the number of times a person was recommended in the snowball process and their stated orientation towards environmental change. The researcher tried to balance the representation of conservative, moderate or liberal orientations in the sample.

The ethnographic method was used to survey the opinion leaders. It involved, "unstructured interviews and conversations with opinion leaders and key contacts to gain an understanding of how they view their world" (ibid:3). "The ethnographic method enables the researcher to report with validity "what kinds of people think/feel what kinds of ways about what kinds of things, events and people" (Canton-Thompson, 1994:3).

Using both qualitative and quantitative data, this method enabled the researcher to expand the Forest Service's understanding of how environmental impacts effect social conditions. The social assessment became a record of the opinion leaders' perspective on a variety of issues related to the management of the Bitterroot National Forest. The quantitative data included demographic information on Ravalli County from the US Department of Commerce (Census Bureau and Bureau of Economics), State of Montana (Department of Labor Security, Office of Public Instruction and Board of Crime Control), and Ravalli County (Office of County of Superintendent of Schools). Qualitative data was gathered using the ethnographic interviewing method as described above. Typically, qualitative data serves to "prove" the quantitative information by adding both depth and dimension to it. "Although the recorded perceptions of individuals may vary widely from

the norm, the combined views of several competent opinion leaders normally provide a useful and accurate picture of social settings" (ibid:3).

General Population Mail Survey of Ravalli County Residents

A self-administered mail survey was part of a tourism assessment of the Bitterroot Valley (Menning, 1995). The tourism assessment was conducted by the Institute for Tourism and Recreation Research (ITRR) at the University of Montana, School of Forestry. The Institute mailed a survey to Bitterroot Valley residents on March 28, 1995. A total of 782 residents were chosen by selecting a systematic, random sample of names and addresses from the Bitterroot Valley portion of the US West-Missoula telephone book. "Of the 782 addresses selected, 165 were subsequently removed because their questionnaires were undeliverable (due to expired forwarding orders, insufficient addresses, etc.)" (Menning, 1995:3). Reminder post cards were sent out one week after the initial mailing and replacement surveys were mailed to all non-respondents four weeks later. By May 5, 1995, the questionnaire was completed by 285 people, representing a 46 percent response rate, with a sample frame of 617.

A nonresponse bias check was included in the study. Institute researchers tried to contact all remaining respondents by telephone three or four days after the survey closing date of May 5, 1995. "Short interviews were completed with 70 nonrespondents, using selected questions from the original mailed questionnaire" (ibid:3). The questions were selected to reflect significant differences between responses to the original and replacement surveys. The presence of significant differences indicate possible areas of nonresponse bias.

While the main body of questions and statements surveyed residents on their opinion's about tourism and tourism development, 15 questions were commissioned for the Human Dimensions component of the Bitterroot Ecosystem Management Research Project (BEMRP). Those questions specifically queried respondent's relationship with the Bitterroot National Forest and their opinion on various management issues. In addition to demographic information obtained, it is the responses to selected items from these 15 questions that will be evaluated in this paper.

Comparison of Information Sources and Issues

Opinion Leader Characteristics

Opinion leaders were categorized according to their length of residence in the Bitterroot Valley. There were six old-timers, 24 locals and eight newcomers. The opinion

leaders were further categorized by their orientation towards the environmental and forest management. This breakdown included 18 amenity orientated, 21 commodity orientated and 12 neutral orientated. The five most frequently mentioned occupations of the opinion leaders (in descending order) were farmer/rancher, educator/teacher, journalist/writer, natural resource manager and timber industry/woods worker.

General Population Characteristics

Demographic characteristics were collected as quantitative data in the selfadministered mail survey completed by 284 people. The gender breakdown showed 59 percent of the respondents were male and 41 percent were female. The age structure was divided into thirds, with the first third representing 17-43 year olds, the second third ranged from 44 to 61 year olds and the remainder (34%) were 62 years old or older. The number of years respondents have lived in Ravalli county was also split into thirds. Thirtythree percent has lived in the county between two and seven years, 34 percent has lived there between eight and 20 years and the remainder (33%) has lived there more than 21 years. The top occupation of mail survey respondents was retired (39%). The next four included (in descending order): professional (20%), missing (11%), manager/administrator (7%) and housewife (6%). The service category was the leading industry in which respondents worked. It had 24 percent of the total and was followed by manufacturing/construction (15%), education (11%), retail/wholesale (11%) and government (9%). When asked about income, 19 percent choose not to respond. Of those who did answer the question (231 people), 65% earned less than \$39,000 (gross household income). Sixty-eight percent of the sample had at least some college experience, and 19 percent had done some post graduate work.

The following section discusses the general population's responses to three statements from the mail survey. The statements were selected because they relate to issues of ecosystem management. Correlating seven demographic characteristics (gender, age, length of residency, occupation, industry in which they work, income and education) of respondents with the three mail survey statements gives some insight into the general public's opinion on how forest resources are used, prescribed fire as a management tool and the credibility of scientists and experts.

While most demographic variables fell into natural categories ("gender" and "occupation" for example), "age" and "number of years in the community" were split into thirds to facilitate analysis in this paper. The "income" variable was divided into two groups -- less than \$39,000 and more than \$39,000.

Issue One: Utilization of Forest Resources

The first statement from the general population survey addresses the wood products industry and the potential for other uses of forest resources. Timber production is an issue that is the focus of many conversations in the Bitterroot Valley, but people in the Valley have depended on a variety of resources for their livelihoods. Across the seven demographic variables (gender, age, years in community, occupation, industry, income and education), a majority of the general population supported altering how forest resources are currently utilized in the Bitterroot Valley.

BNF should emphasize a wide range of uses and benefits rather than timber and wood products alone.

Seventy-seven percent of both male and female respondents agreed or strongly agreed with the survey statement. Only 15 percent and 11 percent, respectively, disagreed or strongly disagreed that forest resources should be used for a variety of purposes.

Gender	Total	Agreed	Disagreed	No Opinion
Male	125	77%	15%	6%
Female	100	77%	11%	10%
Missing	21			
Total	246			-

^{*}Percentages given for "agreed" or "disagreed" include percentages for "strongly agreed" and "strongly disagreed" respectively.

** Some categories do not add up to 100 percent due to "missing" responses.

In addition, a strong percentage of respondents, regardless of their age, agreed or strongly agreed with the need to emphasize other uses of forest products.

Age		Total	Agreed	Disagreed	No Opinion
17-43		81	79%	12%	7%
44-61		94	73%	17%	6%
62+		109	79%	12%	8%
	Total	284			

Strong support for this statement is clear. No matter how long they have lived in the Valley/Ravalli County, a majority of survey respondents agreed or strongly agreed that forest resources should be used for a variety of purposes.

Yrs. of Residency	Total	Agreed	Disagreed	No Opinion
2-7	77	78%	12%	9%

8-20	92	84%	10%	4%
21+	115	71%	17%	9%
	Total 284			

Of the top five occupations, a strong majority of respondents agreed or strongly agreed that forest resources should be diversity used.

Occupation	Total	Agreed	Disagreed	No Opinion
Retired	84	77%	10%	12%
Professional	47	85%	9%	2%
Missing	34	82%	12%	3%
Manager	22	82%	18%	. 0%
Sales	16	81%	6%	0%
Housewife	14	57%	21%	14%
Missing	34			
	Total 251			

Respondents from the top five industries responded similarly to the survey statement.

Industry	,	Total	A	Agreed	Disagreed	No Opinion
Services		36		86%	6%	6%
Manufacturing		26		73%	15%	12%
Retail		17		82%	6%	12%
Education		16		94%	0%	6%
Government		12		83%	17%	0%
Missing		27				
	Total	134				

Based on the breakdowns of \$39,000 or less and \$40,000 or more, income did not seem to have an influence on respondents opinions towards emphasizing uses and benefits other than timber and forest products. A strong majority agreed or strongly agreed with the survey statement.

Income	Total	Agreed	Disagreed	No Opinion
≤39K	150	77%	13%	8%
≥40K	81	82%	12%	4%
Missing	53			
Total	284			

Of the total population surveyed, 68 percent of the respondents had some college education and 19 percent had some post graduate education. The amount of support for diversifying the benefits gained from forest resources is strong and increases as the level of education achieved increases.

Level of Education	Total	Agreed	Disagreed	No Opinion
1-12	65	68%	19%	11%
Vocational	22	77%	9%	14%
Some College	97	77%	14%	7%
College Graduate	40	78%	13%	5%
Post Graduate Study	53	89%	6%	2%
Missing	7			*
Total	284			

Opinion leaders, on the other hand, responded to this issue differently because, in part, issues and discussions were framed within the ecosystem management paradigm. Opinion leaders were more sophisticated than the sample of the general population in their understanding of forest health/resource issues, including ecosystem management. The opinion leaders displayed an ability to define and discuss scientific concepts and forest processes. Consequently, the nature of the data gathered from the opinion leaders was more complex. The interview process went beyond discussing whether an issue is simply right or wrong -- personal opinions, feelings and beliefs about the potential impacts of forest-related issues were verbalized.

Opinion leaders' responses are presented in accordance with their environmental orientations, but in general, all groups defined ecosystem management as a holistic approach to balancing all natural resource elements, including humans.

Amenity group members defined ecosystem management as, "...the best way of achieving desired future conditions, thereby ensuring forest usefulness to all citizens" (Canton-Thompson, 1994a:95). Several members of the neutral group defined ecosystem management as the, "manipulation of an ecosystem's manageable elements to bring them into balance with unmanageable elements" (ibid:89). They also felt that a change in how forest resources are used would be beneficial in the long run. "EM will result in a slow down of wood fiber production for several decades during which time past mistakes are being remedied" (ibid:96).

Commodity orientated opinion leaders, on the other hand, expressed concern about the implementation of ecosystem management. "Timber and grazing concerns should outweigh possible benefits of accelerated EM to prevent severe economic hardship on

commodity dependent communities" (ibid:100). The group of commodity opinion leaders felt that with the implementation of ecosystem management came some negative economic impacts related to how forest resources are used, including, "...lower timber harvest levels, and more managed diseased and dying timber" (ibid:96). The commodity group also felt that trade-offs would be required. As forest resource users, they would have to "tailor their activity to impact the environment as little as possible while obtaining maximum product output" (ibid:89).

Issue Two: Prescribed Fire

For approximately the past 70 years, the Forest Service has had a fire suppression policy in the Bitterroot Valley. Thus, the natural role of fire has virtually been eliminated, but as scientific knowledge and technology evolve, fire's role in natural resource management is being redefined. Research shows that prescribed fire can help rejuvenate the diversity of a landscape by being used as a tool to help restore the role of natural fire in an ecosystem. The second survey statement addresses the use of prescribed fire as a management tool to promote diversity within the forests.

Prescribed fire should be used more frequently to enhance the biological diversity of the Bitterroot National Forest.

The characteristic "gender" had an interesting breakdown in regards to the use of prescribed fire. While a slight majority of men (51%) agreed or strongly agreed with the survey statement, women's' responses were split across the board.

Gender	Γ	Cotal	Agreed	Disagr	reed	No Opinion
Male		163	51%	259	%	25%
Female		100	27%	309	%	42%
Missing		21				
	Total	284				×

When the statement on the use of prescribed fire was crossed against the demographic characteristic of age, no decisive agreement or disagreement could be detected.

Age	Total	Agreed	Disagreed	No Opinion
17-43	81	32%	31%	37%
44-61	94	47%	25%	28%
62+	109	41%	26%	31%

Total 284

As the number of years a respondent has lived in the Bitterroot Valley increases, the amount of agreement increases and the percent of "no opinion" decreases.

Yrs of Residency	Total	Agreed	Disagreed	No Opinion
2-7	77	35%	29%	36%
8-20	92	41%	27%	32%
21+	115	44%	26%	30%
Total	284			

Of the top five occupations, only the "professional" category achieved a slight majority of agreement (51%). Housewives responded with the highest percent of "no opinion" (43%).

Occupation	Total	Agreed	Disagreed	No Opinion
Retired	84	45%	20%	33%
Professional	47	51%	21%	28%
Missing	34	32%	30%	35%
Manager	22	45%	27%	27%
Sales	16	25%	44%	31%
Housewife	14	29%	29%	43%
Total	217			

Although the highest percentage of respondents agreed or strongly agreed with the survey statement, no majority was achieved by any of the top five industry categories.

Industry	Agreed	Disagreed	No Opinion
Services	36%	31%	33%
Mfg/Const.	42%	27%	31%
Education	44%	19%	38%
Retail	47%	24%	29%
Government	42%	42%	16%

Nineteen percent of the survey respondents did not respond to the question asking about their gross household income. Of the 81 percent that did responded, 65 percent earn \$39,000 or less and 35 percent earn \$40,000 or more. Income does not seem to have a significant influence on how the survey sample responded to the statement about the use of prescribed fire to increase biological diversity.

Income Total Agreed Disagreed No Opinion

≤39K	150	37%	30%	32%
≥40K	81	46%	22%	32%
Missing	53			
Total	284			

Education level achieved seems to have some influence the amount of support this survey question received; with the exception of those respondents with vocation training, the amount of support for this statement increased as the level of education achieved increased.

Level of Education	Total	Agreed	Disagreed	No Opinion
1-12	65	43%	28%	28%
Vocational	22	64%	9%	27%
Some College	97	29%	35%	36%
College Graduate	40	43%	23%	35%
Post Graduate Study	53	47%	21%	32%
Missing	7			
Total	284			

Across the series of demographic characteristics and the issue of prescribed fire, a general conclusion can be made about a segment of the general population. There is a noteworthy percentage of "no opinion" responses from female respondents (42%),respondents under 43 years of age (37%), those who have lived in Ravalli County less than seven years, those who are housewives (43%) or who work in the field of education (38%). Also of note is the high percentage of respondents who have at least some college education and who have no opinion on the issue of prescribed fire (36%). This preliminary summary may indicate the general public's lack of understanding of the terminology or concepts used in the mail survey question.

On the other hand, most opinion leaders expressed a meaningful understanding of fire processes and their related effects. Opinion leaders evaluated the use of management ignited prescribed fire (MIPF) as a means to enhancing commodity production and restoring forest health. They also discussed the benefits of allowing natural wildfires to burn in wilderness areas. For reasons not disclosed in the Social Assessment, opinion leader perspectives are not split into specific environmental orientations, but are presented as a whole.

Overall support for the use of MIPF was limited. While one opinion leader stated that, "Some MIPF will (also) have to be lit to accelerate a return to normalcy", others supported the position that MIPF is "a waste of valuable and diminishing resources

(Canton-Thompson, 1994a:107). Several opinion leaders felt that increasing the production level of saw logs and pulp could replace the role fire plays as a restorative process.

Most opinion leaders expressed concern with the Forest Service using MIPF as a restorative management tool. Interviewees felt that, ". . . there have been too many "escapes" for them and other members of the public to trust the Forest Service's capability to accomplish management ignited burning" (Canton-Thompson, 1994b: 9). As one opinion leader put it, "the politics of controlled burns' will have to be resolved" (ibid:9), before MIPF can be publicly accepted as a management tool. When asked what can be done by the Forest Service to facilitate the public's acceptance of MIPF, education was the answer give by most opinion leaders. ". . .education relative to the necessity of using fire as an EM tool must be conducted at the national level" (ibid:10).

Issue Three: Credibility of Scientists and Experts

The last survey statement questions the general population's perspective of scientists' knowledge and impartiality. While 14 percent of the general population surveyed had a college degree, this level of education did not authenticate expert's knowledge in the eyes of the general population. "The perceived technical credibility of information used in FS decisions is important to public acceptance of agency decisions" (SPA, 1994: 38).

Technical and scientific experts are usually biased.

Gender seems to have an influence on respondent's judgment of scientists. A slight majority of men (53% or 87 men) agreed or strongly agreed with the statement that technical/scientific experts are usually biased, while only 42 out of 100 women agreed or strongly agreed. Interestingly, 32% of women had no opinion.

Gender	Total	Agreed	Disagreed	No Opinion
Male	163	53%	27%	19%
Female	100	42%	24%	32%
Missing	21			
Total	284			

A slight majority of the oldest third of respondents agreed or strongly agreed that experts are usually biased. Both categories of respondents under 62 years of age had nearly identical response percentages.

Age	Total	Agreed	Disagreed	No Opinion
17-43	81	46%	27%	26%

44-61		94	45%	27%	26%
62+		109	56%	23%	19%
	Total	284			

Survey data show that the longer a respondent has lived in the Bitterroot Valley Community, the more they agree with the statement on bias. While only 40 percent of respondents who have lived there 2-7 years agreed or strongly agreed, 51 percent of those who have lived there 8-20 years and a majority (57%) of those who have lived there 21 or more years agreed or strongly agreed that experts are biased. The percent of respondents who have no opinion decreases inversely as the length of residency increases. For example, 34 percent of respondents who have lived there less than eight years reported "no opinion", while only 18 percent of those who have lived there more than 21 years reported "no opinion".

Yrs of Residency	Total	Agreed	Disagreed	No Opinion
2-7	77	40%	26%	34%
8-20	92	51%	28%	21%
21+	115	57%	23%	18%
Tota	1 284			

A slight majority of managers/administrators (55%) agreed or strongly agreed that experts are usually biased. The same percent of retired respondents agreed or strongly agreed with the statement. Retirement as an occupation is a characteristic that correlates to age -- 70% of respondents over 62 years old are retired. Educators showed the greatest amount of disagreement (47%) with the assertion that experts are biased.

Occupation	Total	Agreed	Disagreed	No Opinion
Retired	84	55%	26%	17%
Professional	47	34%	47%	21%
Missing	34	50%	21%	26%
Manager	22	55%	23%	18%
Sales	16	44%	19%	38%
Housewife	14	36%	21%	43%
Total	217			

A slight majority of those who work in both the service (50%) and manufacturing/construction (54%) industries agreed or strongly agreed that scientists are

biased. On the other hand, fifty percent of respondents who work for the government or in the education field disagreed with the statement.

Industry	Total	Agreed	.Disagreed	No Opinion
Services	36	50%	31%	19%
Mfg/Const.	26	54%	11%	35%
Retail	17	29%	24%	47%
Education	16	38%	50%	12%
Government	12	33%	50%	17%
Missing	27			
Total	134			

A slight majority (53%) of those who earn \$39,000 or less agreed with the survey statement. Responses of those respondents whose gross household income is \$40,00 or more a year are split.

Income	Total	Agreed	Disagreed	No Opinion
≤39K	150	53%	21%	26%
≥40K	81	41%	38%	20%
Missing	53			
Total	284			

Support for this statement decreases as the level of education increases, with the exception of those who have a high school education. Likewise, the percentage of respondents who disagree increases as the level of education increases.

Level of Education	Total	Agreed	Disagreed	No Opinion
1-12	65	51%	20%	28%
Vocational	22	77%	5%	18%
Some College	97	53%	19%	28%
College Graduate	40	48%	27%	25%
Post Graduate Study	53	30%	53%	13%
Missing	7			
Total	284			

When asked to evaluate Forest management personnel, opinion leader responses differed according to their environmental orientation. Amenity orientated interviewees felt that the Forest Service has become less high-handed and more responsive to public

opinion. In other words, specialists are perceived to be "less authoritative" than they used to be.

The commodity orientated opinion leaders felt that the Forest Service should go back to a hands-on management approach that is based on good science, not on politics. They viewed agency employees as ". . .'the specialists' who should be doing the jobs they have been professionally trained for instead of responding to the disruptive tactics of uninformed an/or dissident publics" (Canton-Thompson, 1994b: 11).

The group of opinion leaders with neutral orientation was supportive of Forest personnel in the Bitterroot Valley. They felt that, "...the Bitterroot National Forest is administered and staffed by professional experts whom they regard as taking good care of the Forest and treating the public well " (ibid 1994:1). Also, "EM will result in fewer unanticipated disorders if society allows Forest Service professionals the leeway to manage in accordance with EM principles" (Canton-Thompson, 1994a:96).

Discussion

Each method of soliciting public opinion varies in terms of its value to land managers who are trying to make informed decisions about how to manage public lands. Each method discussed in this paper had a different intent, and as a result, each depicted different orientations towards forest resource issues. Opinion leaders surveyed for the Social Assessment had clear opinions on forest resource issues, while such strong opinions from the general population did not materialize.

If managers talked exclusively to opinion leaders, it would be unlikely that they would discover the segments of the greater population that are uninformed or without opinion. This brings to light the question of how representative each method on its own - do opinion leaders represent the sentiment of their community or do they represent a more elite perspective? And, does a random sample of households in Ravalli county thoroughly provide the opinions of the general population?

While neither method may be completely representative, it important to recognize their potential to compliment each other. "Properly conducted and interpreted public opinion surveys are not the cavalry coming to the rescue of bewildered managers embroiled in the wars between demanding forest interest groups. Rather their strength is in learning about what the general composition of a population generally thinks about a set of issues. while public opinion surveys do not provide the depth of understanding that interview methods do, they are less expensive and quickly analyzed. Those features may lead to the

use of general population surveys when the level of detail on an issue is less important than the degree of general support. The depth of information that results from an interview process can also be invaluable at times. While the form of information is most similar to that gained in typical public involvement forums, the more intimate nature of interviews allows respondents to describe their positions without the time and social constraints of public meetings.

The strength of public involvement programs lies in the comprehensiveness of methods used to understand public values for natural resources" (Dennis, 1988:314). Developing a program of information collection and use may help organize existing social data and the scheduling of future solicitations of public opinion so that efforts to include public values and concerns in the decision-making process is maximized.

Conclusion

This paper has displayed the relative use of two sources of social data in expanding the understanding of public opinion in the Bitterroot Valley of western Montana. This endeavor has attempted to be an aid to managers when they are considering sources of public opinion about natural resource policy, management and research in a meaningful way.

We started with a social assessment as one method that can be used to gather public opinion. It was a source of qualitative, detailed information on opinion leaders in the Valley. A random mail survey of the general population was another method that shed some light on public opinion. The data it provided was quantitative and gave a quick snapshot of attitudes of the general population.

If, as Babbie claims, the ultimate purpose of social research is to clarify the nature of social life (1995:157), then utilizing a single method is not sufficient. For example, Marshall & Rossman claim that, "When interviews are used alone, distortions in data are more likely, as interviewers may interject personal biases" (1990:83). This is a valid concern with this method, but one that can be remedied. "One direction that research on public participation needs to take is how to structure mechanisms of involvement so that one complements another" (Fiorino, 1990:238). If the goal of public involvement is to incorporate informed public opinion into the natural resource decision-making process, then more than one public involvement mechanism needs to be used to provide a more complete opportunity for participation and better representation of the human dimension.

This is not an easy task. Characteristics of the human dimension, such as values, attitudes and opinions are dynamic. "Public values in national forests have changed, as American society has become more urban and more diverse. These shifts in values have

translated into changes in the political process, leading to the development of a set of political interests in forest management that is more diverse than at any other time in American history" (Wondolleck & Yaffee, 1994:1).

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Chapter Three

The Perceived Role of Tourism in the Bitterroot Valley and Implications for Forest Planning

Wayne A. Freimund

August 1996

The Perceived Role of Tourism in the Bitterroot Valley and Implications for Forest Planning

Wayne A. Freimund

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As the human population of the Bitterroot Valley continues to grow and diversify, it stands to reason that the social values associated with the Bitterroot National Forest will also diversify. Economic stability is an important component of stability in any community and tourism has long been an industry that is considered when the scope of demands on forest resources broadens to further embrace amenity values.

Menning (1995, Appendix 3A) conducted a survey of Bitterroot Valley residents on their opinions about tourism development within the valley. To serve as a compliment to BMERP, the University of Montana added the \$500.00 dollars of support necessary to have a set of questions included in that survey about tourism and the management of the BNF. That study is described in the previous chapter on the comparison of information collection and analysis methods. The purpose of this chapter is to describe in further detail the results of that study which are most relevant to the BNF.

The Role of Tourism

It is clear that residents of the Bitterroot Valley view tourism as an important component of the economic future of the valley. It is also clear, however, that tourism's desired role is not as a dominant industry. Only 12 percent of the respondents felt tourism should have a major role in the economy while 50 percent felt it should remain fairly equal with that of manufacturing, agriculture, wood products and retail (Menning, 1995, p 12).

Within this balanced context, it is also clear that residents recognize the importance of the BNF in sustaining that component of the economy. Table 3.1 displays the responses to the 15 questions included in the 1995 survey that related directly to the BNF. The questions were selected in cooperation with BEMRP scientists, the Stevensville District Ranger and the author. They were selected to gain information on issues central to BEMRP in addition to those of tourism.

General Opinions About Tourism and the Management of the BNF

Most residents agree that the beauty of the Bitterroot mountains are a primary draw for tourists (89%) and that the appearance should be maintained and enhanced through forest management (84%). This desire is pervasive in spite of mixed belief that increased tourism would improve the health of the forest. In reference to the management of the forest for tourism, most people agree that there are adequate trails and facilities provided by the Forest Service but there is indication that people are not as aware that they would like to be about programs and research associated with the BNF. When issues specific to ecosystem management are considered, there is a large degree of uncertainty or indifference within the sample. While only 6.3 percent of the population do not have an opinion about the beauty of the forest, over 35% of the respondents are without an opinion about the role of fire in the ecosystem. Topics showing the greatest crystallization of opinion include solid opposition to the addition of new roads for recreational use (66% in disagreement), a disbelief that technology will find a solution to increasing demands on our natural resources (52%), and disagreement that increased tourism would improve the health of the forest (56%).

Table 3.1. Bitterroot Valley residents opinions about selected issues related to tourism and the management of the Bitterroot National Forest.

Questions	Strongly disagree %	Disagree %	Agree %	Strongly agree %	No Opinion %	Missing %
The Beauty of the Bitterroot Mountains s a primary draw for tourists.	1	3.5	51.4	37.0	6.3	.9
The Appearance of the Bitterroot face should be maintained and enhanced through forest management.	2.1	5.7	50.8	33.3	6.4	1.7
Increased tourism would contribute to the health of the BNF.	16.9	40.5	16.6	2.9	22.5	.6
The BNF provides adequate facilities (parking, campgrounds, trails) to accommodate tourists.	9.8	20.5	43.5	6.6	18.7	.9
The BNF provides adequate information for tourists to find trails and facilities.	2.8	6.4	54.8	13.1	21.5	1.5
I am aware as I would like to be of programs being offered by the BNF	7.9	28.8	44.0	5.9	12.5	.9
I am aware as I would like to be about research being conducted on the BNF	10.1	40.3	27.6	3.3	17.9	.9
BNF management should emphasize wide range of uses and benefits rather than timber and wood products alone.	4.0	9.4	51.6	24.2	8.9	2.0
Smoke caused by prescribed burning on the BNF has a negative effect on tourism in the Bitterroot Valley.	11.5	42.6	15.0	13.2	16.7	1.0
There should be more roads in the BNF for recreational access.	36.5	29.5	12.0	6.9	13.8	1.3
The existing roadless areas in the BNF should be included in the Wilderness System.	13.6	21.2	19.6	23.0	20.8	1.9
Prescribed fire should be used more frequently to enhance the biological diversity of the BNF.	5.8	20.8	29.7	7.6	35.3	.9
Managers should improve the biological diversity of the BNF with means other than fire.	2.9	8.9	40.1	9.8	35.4	3.0
Technology will find a way to solve the problem of shortages of natural resources.	22.7	29.5	18.2	2.0	26.1	1.5
Technical and scientific experts are usually biased.	7.0	19.6	34.0	13.6	24.5	1.3

n=288

Subgroups of Opinion About Tourism and the BNF

While general responses to the above mentioned questions provide valuable information, it is clear that the residents of the Bitterroot Valley cannot be entirely defined by averages and percentages. Through a multivariate analysis technique known as factor analysis, the individual questions within the set of fifteen can be grouped into those which are closely related to one another in the way participants responded to them. The relationships begin to show how subgroups of the survey sample, find agreement over particular aspects of forest management.

A factor analysis of the entire population reduced the fifteen (n=288) item set to five distinct factors (groups of questions) that explained 58 percent of the way people responded to the fifteen questions (Table 3.2).

The first and most explanatory group identifies agreement on issues of scenic beauty, protection of biodiversity with means other than fire, and that the BNF is providing an adequate level of information. This group shows additional support for the inclusion of roadless areas in the wilderness system and for the forest to be managed for a wide array of uses. This factor explained 25 percent of the variance in all responses. The emergence of this as the largest factor illustrates the importance of scenic amenities within the general population, and may be informative of a negative reaction that may ensue if those amenities are perceived to be threatened.

Table 3.2. Varimax rotated factor matrix of opinion items on tourism and the management of BNF.

Kr Signer	Factor1	Factor 2	Factor 3	Factor 4	Factor 5
Eigenvalues	3.7	1.5	1.2	1.2	1.08
Percent Var	24.7	10.2	8.2	8.0	7.2
Eigenvewctors					
BAPPEAR	.7629*	0116	0107	.1720	.0189
BBEAUTY	.6501*	.1504	.0483	0032	.1075
BBIODIV	.5127*	.4144	.0332	1421	.2154
BINFO	.5115*	.0920	.3550	.3872	2836
BTECH	0003	.7003*	.0739	.2899	.1235
BBIAS	.2451	.6931*	.0112	1476	.1290
BROADS	.0286	.5350*	.2042	.2802	2043
BFIRE	.3642	.4619*	.1545	.3180	0230
BRESRCH	0028	.1357	.8580*	.1690	.1072
BPROGRAM	.0796	.0802	.8708*	0407	.1309
BRDLESS	.4073	.2624	0757	.4276*	.2553
BFACILTY	.1517	0053	.2545	.6430*	0004
BHEALTH	0252	.1953	0906	.7068*	.1913
BBURN	0483	.2659	.1541	.0866	.7263*
BWIDEUSE	.3109	1557	.1085	.1416	.7020*

The second factor, which explained 10 percent of the variance included trust in technology, agreement that experts are biased, agreement that roads are needed for increased recreational access and that prescribed fire should be used more frequently. This group appears to support a more active form of forest management. Although they believe technical experts are biased, these results do not offer an evaluation of whether that is a good or bad thing.

The third factor (8.2% of variation) defines a desire for further information about programs and research. This supports previous information that has been related to forest managers about desires for more USFS extension within the Valley.

The fourth factor (8% of variation) identifies a group with the belief that the number of facilities are adequate for tourism, the existing roadless areas should be included in the wilderness system and that increased tourism would contribute to the health of the BNF. This group further believes that tourism will lead to the improvement of forest health.

The final factor (7.2%) identifies a relationship between the belief that smoke from prescribed burning has a negative effect on tourism and that the forest should be managed for a wide variety of uses. This group also has moderate support for the inclusion of the existing roadless areas in the wilderness preservation system.

These five groupings of the general population offer forest managers distinct population segments that should be considered when engaging in forest planning and management. It also must be considered, however, that there is a high degree of non opinion about many of these issues within the general population. Those without an opinion, while important, are less likely to engage forest managers about the design or implications of their plans.

To investigate further the affect high levels of "no opinion" responses may have on the data, a second analysis was run on only the respondents with an opinion for each of the items. This dropped the sample to a third of the general population (from n=281 to n=91). As may be expected, those participants with opinions on each item were more crystallized in their beliefs. This analysis resulted in just three factors that accounted for a total of 63 percent of the variation within responses by that subgroup to the items (Table 3.3).

Table 3.3. Verimax rotated factor matrix of opinion items on tourism and the management of

BNF for respondents that had an opinion on all items.

ALTER SERVICE	Factor 1	Factor 2	Factor 3	
Eigenvalues	6.3	1.8	1.4	
Percent of Var	41.8	11.8	9.6	
Eigenvectors				
BROADS	.8487*	.1498	.0209	
BFIRE	.7909*	.2529	.1538	
BINFO	.6387*	.2455	.3139	
BBIAS	.6044*	.0522	.3186	
BTECH	.5886*	.1588	.3337	
BRESRCH	.4158	.7909*	0332	
BPROGRAM	.3341	.7703*	.1013	
BHEALTH	.2296	.7021*	.1237	
BBURN	0226	.6674*	.2726	
BFACILTY	.1488	.6392*	.0891	
BWIDEUSE	1447	.6183*	.5461	
BRDLESS	.2658	.2228	.7404*	
BAPPEAR	.3675	.1540	.7473*	
BBIODIV	.1630	.0459	.7802*	
BBEAUTY	.5491	.2596	.6092*	

N = 91

The first factor accounted for 42% of the variation in responses. This group illustrated a desire for more roads and prescribed fire in the BNF. This group agrees that the BNF provides adequate information for tourists and even though technical experts are biased, technology will find a way to solve the problems facing natural resources management today. This group would likely be supportive of increased management activity within the BNF. The negative relationship with the item on managing for a wide array of uses suggests that timber management would be most supported by this group.

The second factor (11.8% of variation) appears to represent a tourism focused group. This group would like to be more informed about the research and programs available on the BNF. They agree that increased tourism would improve the health of the BNF, smoke caused by prescribed burning is negative for tourism, the existing facilities are adequate for tourists and that the forest should be managed for a wide variety of uses.

The third factor, explaining 9.6 percent of the variation shares strong agreement on the importance of scenic beauty and appearance, inclusion of roadless areas and the promotion of biodiversity with means other than fire and the management of forests for a wide variety of uses. This group has the least interest in research of any of the groups and may be the most preservation oriented in their responses.

Discussion

There is strong overall support for the tourism industry to fit within a diversified economy in the Bitterroot Valley. However, there are distinct difference of how tourism should relate to the BNF. In the general population, five groupings of agreement were identified within this data set. The most explanatory of those was the importance of the BNF appearance, the maintenance of biodiversity without the use of fire, and a sentiment that the BNF is providing adequate information to tourists. However this group is substantially affected by a lack of opinion on several issues. Those residents of the valley who are relatively unopinionated are more likely to hold the aesthetic values of the forest in their highest interest. In other words, there are many people within the valley who are interested in the form rather than function of the forest. To these people, the Bitterroot mountains provide an important backdrop to their everyday lives.

These results further suggest that about a third of the general population are fully opinionated on the range of issues presented in this survey. That group is dominated by people most interested in the extractive values of the forest. When only people with opinions on all items are considered, the number of groups drops to three and the ranking of the issues changes dramatically. The grouping of people most interested in active timber management, road building and burning, emerges as the dominant grouping. Those most interested in the aesthetic values of the forest move to the third group and explain only 9.6% of the variance.

At the minimum, these results suggest that managers should restrain from falling into the trap of considering a "general public" in their managerial relations. That rather a general population survey can provide important information about subgroups of that population.

The results further suggest that the opinion leaders have not reached a substantial portion of the public on issues of prescribed fire and biodiversity. Given the central role of these two topics within Ecosystem Management, there is considerable potential for misconceptions that could lead to conflicts between the reasoning of prescribed burns or stand replacement disturbances and the desires of a visual condition that remains attractive for residents and tourist alike.

A secondary analysis of this data set should follow that presented in this paper. Further definition of the demographic characteristics of these individuals within each grouping would identify systematically different components of the general populations. It must also be considered that in both analyses, no more that 63% of the total variance are explained by these

five or three groups. This suggests that although the groups are statistically unique, there is considerable overlap across groupings for many of the individuals. It is also possible that the range of items on the scale is incomplete in clearly defining the range of public opinion.

Appendix 3 A

Opinions about Tourism Development in the Bitterroot Valley:

A Survey of Residents

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RESEARCH REPORT 42

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This research was conducted on behalf of the residents of the Bitterroot Valley, whose responses to the questionnaire are greatly appreciated.

OPINIONS ABOUT TOURISM DEVELOPMENT IN THE BITTERROOT VALLEY: A SURVEY OF RESIDENTS

Introduction

This report summarizes residents' opinions about tourism in the Bitterroot Valley based on responses to a mail survey during spring 1995. The research was conducted to support a broader tourism assessment process being undertaken by a committee composed of Valley residents. Results of the study will be used throughout the remainder of the assessment process to constrain and guide the committee's discussion and decisions.

The Community Tourism Assessment Process

The Bitterroot Valley tourism assessment committee is participating in a yearlong process.¹ It is a fundamental premise of the process that any individual community or area may or may not have potential for further tourism development. For example, areas or communities may lack necessary infrastructure or attractions or perhaps there is no adequately-sized market for their opportunities. Of equal consideration is the community's goals or vision for their future and the role that tourism may play in that future; communities should not proceed with additional tourism development if they

determine that the social, economic, and environmental costs of that development will exceed the associated benefits.

At the conclusion of the assessment process, members of the Bitterroot Valley's assessment committee will decide whether further tourism development is warranted and desired in the Bitterroot Valley. This decision will be based on consideration of a wide variety of information, including present levels and characteristics of travel, existing travel-related infrastructure and attractions, and the area's need for economic development. Resident opinions about tourism development, including its social, economic, and environmental impacts, are also considered in the assessment process.

If the community decides that further tourism development is desirable, they can move from assessment to planning and development of possible tourism projects. At that point, information on resident values and concerns regarding tourism development and its impacts can be used to evaluate and modify possible development projects.

Resident Opinions About Tourism

Residents of an area may hold a variety of opinions about tourism and tourist activity. They may have certain ideas about the broad nature of tourism as an industry. They may also have perceptions of the specific impacts of tourist activity, both positive and negative, and how those impacts affect them person-

The Community Tourism Assessment Process is facilitated by Travel Montana and the Montana State University—Extension Service with support from the Institute for Tourism and Recreation Research at The University of Montana. Communities apply to Travel Montana for the opportunity to be assisted through the process.

ally. Finally, they may have preferences for how tourism is managed for their community's future, including how tourism development relates to other options for economic development.

While facts may be debated as right or wrong, there are no right or wrong opinions. Resident opinions about tourism, perceived impacts of tourist activity, and future economic development strategies may or may not reflect realities. However, they are important in several ways.

First, opinions are a crucial measure of support for community and industry actions. Developments that directly conflict with expressed concerns and opinions may face substantial opposition.

Second, opinions suggest where community and industry leaders should focus in their search for real impacts. For example, if opinions suggest out-of-state hunting is not perceived as a problem but out-of-state inmigration is, then industry leaders would be wise to expend resources determining and addressing the relationship between migration and tourism before considering issues related to hunting and tourism.

Finally, in some cases, perceptions or opinions are reality. A good example is the concept of crowding. Crowding cannot be objectively measured because it is a perception; if someone feels crowded, they are crowded.

Survey Purpose and Objectives

A survey of resident opinions about tourism and tourism development is one step of the yearlong community tourism assessment process. The results are key to determining local receptivity to tourism development and promotion. Three broad questions are answered by the resident survey process:

- How do local people feel about tourism development?
- Are there certain groups within the community that are less supportive?
- What specific issues or concerns do residents have that must be taken into consideration in the community tourism assessment process?

In addition to answering the above questions, the surveying process is the baseline from which a broad network of participation in the tourism assessment, planning, and implementation process may be built. Furthermore, if the assessment committee determines that further tourism development is appropriate, information collected in the survey helps the committee direct any future tourism development into projects that are acceptable to residents.

The specific objectives of the resident opinion survey are to:

- determine the level of community support or lack of support for tourism development,
- assess to what extent residents currently perceive the positive or negative impacts of tourism,
- identify specific concerns of residents about tourist activity and tourism development,
- outline the role that residents see for tourism in the community's future,
- determine resident perceptions of the best opportunities for economic development, and
- identify key characteristics that distinguish between those who support tourism development and those who do not.

Design and Methodology

Resident opinions about tourist activity and tourism development were determined through a mail questionnaire. Residents of the Bitterroot Valley were chosen by selecting a systematic, random sample of names and addresses from the Bitterroot Valley portion of the US West-Missoula telephone book.

A questionnaire was mailed to 782 Valley residents on March 28, 1995. Reminder postcards were sent one week later and replacement questionnaires mailed to all nonrespondents on April 25. Of the 782 addresses selected, 165 were subsequently removed from the sample. Five were removed because respondents failed to completely fill out their returned questionnaires and the remainder were removed because their questionnaires were undeliverable (due to expired forwarding orders, insufficient addresses, etc.). This resulted in a net sample size of 617. By May 5, 285 residents had returned completed, usable surveys to ITRR, for an overall response rate of 46%.

On May 8th and 9th, ITRR researchers tried to reach all remaining nonrespondents by phone. Short interviews were completed with 70 nonrespondents, using selected questions from the original mailed questionnaire. The database of questionnaire responses was subsequently weighted to adjust for nonresponse bias as quantified by the 70 telephone interviews.

Level of Support for Tourism Development

Almost half (49%) of Bitterroot Valley residents agreed or strongly agreed that the overall benefits of tourism outweigh the negative impacts: 33% disagreed or strongly disagreed with the statement, and 18% had no opinion (Figure 1). While more Bitterroot Valley residents agreed than disagreed with this overall assessment, the figures for the Bitterroot compare poorly with those for the State of Montana as a whole. Statewide data collected on an ongoing basis indicates that consistently 65-80% of Montanans agree that the benefits of tourism outweigh negative impacts. Results in the Bitterroot Valley are consistent with a pattern seen throughout the state - that, as tourism levels increase, 1397510 resident support for tourism decreases.

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Perception of Positive and Negative Impacts

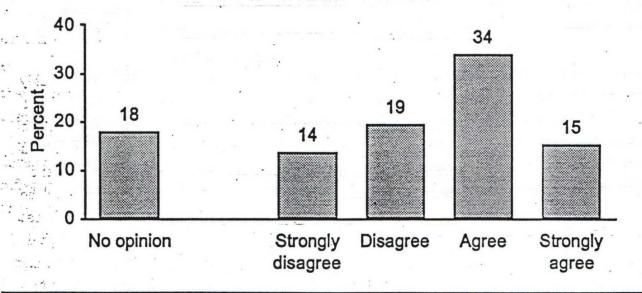
Overall perceptions of tourism are based on a composite of experiences, feelings, and impressions about the many specific positive and negative impacts of tourism and tourist activity. Respondents may or may not have perceived various positive or negative impacts associated with the tourism industry. Thus, in addition to making an overall evaluation of the perceived balance between positive and negative impacts, respondents were asked if they agreed or disagreed with statements suggesting a variety of positive and negative social, economic, and environmental impacts of tourism and tourism development.

Bitterroot Valley residents perceived some impacts and not others. To the extent that they perceived positive impacts and did not perceive negative impacts, they may be said

Questions were selected for use in the nonresponse bias check based on three criteria.

First, three questions used by ITRR in an ongoing statewide opinion poll were included. Second, data on length of residence in Montana and perceptions of how the respondent was personally affected by tourism were collected because of their explanatory power with regard to tourism opinions. Finally, remaining questions were selected by identifying items where responses to the original and replacement questionnaires differed significantly, thus indicating possible areas of nonresponse bias.

Figure 1. Bitterroot Valley responses to: "The overall benefits of tourism outweigh the negative impacts."



to have positive opinions about the industry. Conversely, to the extent they perceived negative impacts and not positive ones, they may be said to hold negative opinions regarding the industry.

Reflecting generally positive opinions about tourism, a majority of Bitterroot Valley residents agreed with the following positively-phrased statements:³

- Tourism encourages investment in our local economy (71% agreed).
- The tourism industry provides many worthwhile employment opportunities for Bitterroot Valley residents (64% agreed).

Also reflecting general support for tourism development, a majority of residents disagreed with the following negatively-phrased statement:

Many opinions were not supportive of tourism. A majority of residents agreed with the following negatively-phrased statements:

- Most of the jobs in the tourism industry are low-paying (80% agreed).
- Tourists add greatly to traffic problems in the Bitterroot Valley (80% agreed).
- Tourism is responsible for too fast a rate of development in the Bitterroot Valley (51% agreed).

Also reflecting unsupportive opinions, a majority of residents disagreed with the following positively-phrased statements about tourism:

 The environmental impacts resulting from tourism are relatively minor (53% disagreed).

Tourists are a burden on the Bitterroot Valley's services (62% disagreed).

Percentages given are for those respondents who "agreed" or "strongly agreed" with a particular statement. The remaining respondents either (1) "disagreed" or "strongly disagreed" with the statement or (2) indicated they had "no opinion" about the statement.

Percentage given is for those respondents who "disagreed" or "strongly disagreed" with the statement. The remaining respondents either (1) "agreed" or "strongly agreed" with the statement or (2) indicated they had "no opinion" about the statement.

- Our household standard of living is higher because of money tourists spend here (62% disagreed).
- The quality of life in the Bitterroot Valley has improved because of tourism (64% disagreed).

Four additional statements, all negativelyphrased, failed to receive a majority of either agree or disagree responses. Two statements reflect resident perceptions of crowding; the remaining statements refer to crime problems and perceived inequities in paying for services used.

- The Bitterroot Valley is becoming overcrowded because of more tourists (46% disagreed; 46% agreed).
- Tourism has increased the number of crime problems in the Bitterroot Valley (48% disagreed; 35% agreed).
- Tourists crowd out local residents in good recreation areas (46% agreed; 40% disagreed).
- Tourists do not pay their fair share for the services they use (44% agreed; 40% disagreed).

The above information is portrayed in Figure 2 in a way that allows a comparative assessment of the issue of tourism impacts. Statements in the top half of the figure are positively-phrased and those in the bottom half are negatively-phrased.⁵ Bars extending to

the right of the vertical center line indicate overall agreement with the statement; bars to the left of the line indicate disagreement.

The extent of agreement or disagreement (the mean response) is reflected in the length of the shaded bar. In the top half of the figure, where statements are positively-phrased, it is desirable for respondents to agree with the statements. Below the midpoint, with negatively-phrased statements, it is preferable for the mean response to be in disagreement.

Bitterroot Valley residents agreed with only three of the six positively-phrased statements of potential tourism impacts. Bitterrooters disagreed that the environmental impacts of tourism were relatively minor, that their household standard of living had risen as a result of tourism, or that tourism improved residents' quality of life.

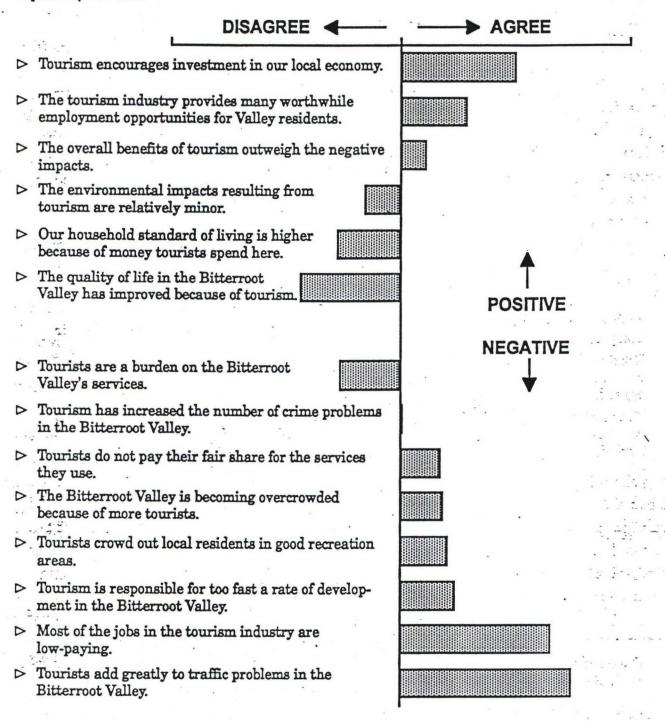
Below the midpoint, where it is preferable if respondents disagree with negativelyphrased statements regarding tourism impacts, respondents disagreed with only one of eight statements. Bitterrooters disagreed that tourists were a burden on Valley services (although they agreed that tourists did not pay their fair share for services received). The greatest agreement regarding perception of negative impacts was with regard to traffic problems and the low-paying nature of many tourism sector jobs.

The concept of being positively- or negativelyphrased needs further clarification. The
distinction does not reflect whether one is protourism or anti-tourism. Rather, what is
indicated is whether a positive or negative
impact has been perceived. Regardless of
one's position with respect to the industry, one
would hope that people and communities
enjoyed the positive impacts arising from
tourism and not the negative ones. Thus, with
a positively-phrased statement, agreement
indicates that one either perceives the positive
impact or does not perceive the negative
impact; either is a "positive" outcome. With

negatively-phrased statements, the converse is true; agreement with the statement is a "negative" outcome — either a positive impact as is not perceived or a negative impact is.

The analysis displayed in Figure 2 excludes responses of "no opinion" for each statement. Thus, the data represents mean responses of those who expressed an opinion.

Figure 2. Bitterroot Valley responses to statements regarding potential positive and negative impacts of tourism.

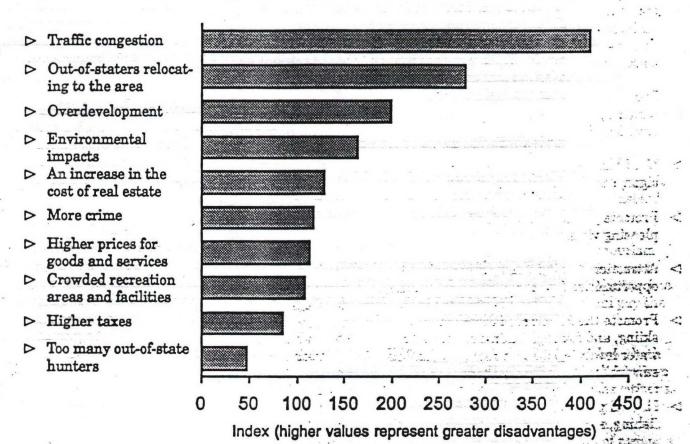


These results suggest the importance of several negative impacts of tourism in residents' minds. In a separate question, we asked respondents to rank possible disadvantages that they or the Bitterroot Valley as a whole may experience as a result of increased

tourism (Figure 3). Consistent with previous findings, traffic congestion was identified as the biggest disadvantage of tourism development.

An open-ended question at the end of the questionnaire also solicited residents' con-

Figure 3. Possible disadvantages of increased tourism, ranked by Bitterroot Valley respondents.



cerns regarding tourism development. The question was phrased: "Do you have any other concerns related to tourists or tourism development that were not addressed in this questionnaire? For example, are there places or events that you would or would not want promoted as tourist attractions?"

In 13 responses, residents suggested ideas for tourism promotion; 20 identified activities or places that should not be promoted. The numerous concerns expressed in response to this question varied widely, referring to quality and aesthetics; traffic, infrastructure, and planning; economic issues; population growth and development pressures; the environment, natural resources, and recreational opportunities; and the militia. Residents' open-ended responses follow:

Promote

- ▶ Music festivals.
- > Another golf course in area.
- Promote music. Do not send crowds into the wilderness before they are educated on wilderness values.

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- ➤ More horse shows; promote specifically Arabian. Promote Indian type festivities. Promote skiing/snowmobiling.
- ▶ Promote Buss Creek Wilderness area.
- I would like to see more historical places and events promoted. More focus on "regular" people who make up the vast majority of tourists would be a plus.

- Our county fair should be more supported through advertising – a great fair, 4H is big, crafts are big, rodeo is good. A route with various points of interest in the whole Valley – advertised at Sula and Florence – with a place where maps could be picked up.
- Promote: Daly Mansion, summer and winter special events, museum, and natural environment.
- Need more historic education programs, signs, rest areas.
- Promote good hunting and fishing and pleasing vistas.
- Attractions: Daly Mansion, recreational opportunities for the aging "baby boomers".
- Promote the Bitterroot Powwow, more skiing, and fishing. Maintain adequate water levels in lakes for recreation and fish survival.
- ▷ I would promote solely hiking and fly fishing, and only with strict rules for both sports.

Don't Promote

- ➤ Tourism does not have to be promoted, it's self promoting.
- Do not promote wilderness areas unless the recreator can prove they are knowledgeable and have the right equipment.
- > None of the hunting or fishing.
- No casinos. ·
- No militia gatherings or like types!
- ▷ Don't promote forests, rivers, or creeks.
- ➤ I would not promote the lakes and fishing part of it. Water is too important a resource to be abused with outboard boat motors, jet skis, etc.

- Nothing that offers alcohol as an attraction. Make family a #1 concern. Wholesomeness.
- Do not promote: housing developments, anything that will destroy our "rural" way of life and natural resources.
- Do not encourage gambling and casinos or other immoral business.
- ▶ Leave much of tourism to the private sector. As traffic increases, or as it is anticipated, make necessary improvements (roads, trails, amenities). Don't go all out and promote it, but be courteous to those who choose to come.
- ➤ Keep them out of our creeks!
- ▶ Do not promote the Bitterroot Valley!
- I would not like to see mega-events such as rock concerts.
- No off-road motor events or motor boats on river.
- No roadside casinos. We need clean air events and industries.
- I personally do not want my beloved Bitterroot Valley used to promote tourism.
- ➤ We don't need more tourists.
- Not in my backyard.

Comments about Quality and Aesthetics

- ➤ I would hate to see cheap tourist attractions that have sprung up in places like Jackson Hole, WY, such as gift shops, junk shops, etc.
- Please no tourist traps.
- ▶ I hate to see the increase in commercial strips along Highway 93. The strips in Hamilton and Stevensville detract greatly from the beauty of the Valley. Make better use of downtown space and facilities and control strip development.

- ▶ I am not in favor of things like the miniature golf course we had in Hamilton on Highway 93. We can't stop visitors from coming, but maybe it would be best if they enjoyed what those of us who live here enjoy.
- Small, locally-owned businesses should be encouraged and large, out-of-area businesses discouraged. The number of the latter has increased enormously and is primarily responsible for the ugly strip along 93.
- ▶ I feel that many of the individuals and businesses in Hamilton could greatly improve our image by cleaning up vacant lots, keeping sidewalks cleaned during winter (isn't there a law on the books concerning this?), and sweeping the streets other than Main and 1st (or did only those taxpayers pay for the sweeper?).

Comments about Traffic, Infrastructure, and Planning

- Widening Highway 93 to accommodate the excess traffic is a must.
- ▶ Traffic is the most overwhelming.
- ▶ What we need is better rural county roads.
- ▶ I feel there has to be a four lane highway to Missoula if we are to attract tourists; as it is now, it's too congested just for local residents.
- Highway development and service infrastructure is not keeping up with growth and traffic.
- Our roadways cannot handle any more traffic. The existing local traffic is far too dangerous and overcrowded. Why would we want to encourage any more people to move here?
- ▶ Infrastructure roads, sewage, power supplies, billboards, etc.

▶ I would hope the development of tourism and development of the Valley overall be carefully planned and controlled so the atmosphere and beauty of the Valley is preserved. The planning needs to take place now since the Valley has already changed a great deal.

Comments about Economic Issues

- Who is going to pay for it? It should be those who wish to capitalize on tourism. It would be nice if we had a highway instead of a road.
- ➤ I would like to see more taxes for tourism and special cards for native Montanans to get a break from those taxes. If the tourists want to come to Montana, let them pay the taxes.
- Whitefish and West Yellowstone have both been imposed with a 3% tax which I believe was established not by a vote of the citizens. Auto dealers and other businesses would probably close up as I would buy a car, etc. from dealers in Missoula instead of paying a 3% tax.
- The only ones benefiting from tourists are motels, and a very few other businesses.

 For the rest of the people, they are a pain in the butt.
- Montana is putting all its eggs in the tourist basket. No well-paying jobs are being created which allow young families to remain in state.
- ➤ Tourism only seems to generate minimum wage jobs, raise property taxes, and displace the local people.
- ➤ Tourism is largely low-paying, seasonal employment. It offers little toward community stability or quality of life for yearlong residents.
- The overall negative thing I see about tourism is that our own young people who stay here become "service people": waiters, cooks, motel operators, and housekeepers. They only receive minimum wages.

Comments about Population Growth and Development Pressures

- Realtors have not paid their share.
- My biggest concern is the population growth and development that decreases the quality of life in the Bitterroot.
- Description They come as tourists, then they move here. Soon the only thing that looks like the Bitterroot is the mountain. Tourists will make so much dust you will not see them soon. I remember when you'd go to town, you'd know them. Now I feel I am in the wrong town.
- ➤ The largest problem with tourism is the amount of wealthy landbuyers coming into the Valley; this drives home prices beyond the reach of the average Valley resident, as the pay scale in the Valley is very low compared to the national average.
- Greatest concern is crime and the impact that too liberal or abusive people may and do move here from other places. They may have been tourists, but then just as likely, may have not. I believe this area, along with tax problems locally, are of a separate basis than tourism and need great attention as well.
- ▶ I don't think tourism really makes a lot more crime at this point. It seems a lot of people moving to the area with children who have no respect for property of humans, think that this area can solve their problems which it can't do, so they make things worse for everyone else.
- Montana's "Last Best Place" reputation has already overcrowded the Valley with people who want to get away from what they are trying to turn Montana into (ironic, no?). Streets, schools, housing are all overcrowded. The local and state governments want to bring in more people to get the money to pay for the last 5 years' influx. Always playing "catch-up" and becoming more crowded, more dirty, and more expensive. Look at what happened to Santa Fe, NM. Ask them how well it worked.

Comments about the Environment, Natural Resources, and Recreational Opportunities

- ➤ I feel tourism would have less negative impact if local businesses involved were more eco-conscious, i.e., becoming more aware of the benefits of recycling waste products, using water saving devices, etc.
- Environmental impacts on water quality and wildlife.
- Nothing was mentioned about pollution in this questionnaire.
- ➢ Air pollution due to heavy tourism and commuting travel.
- Need to consider tourism's impact on water quality, winter game range, and road travel safety.
- Need more patrols of the forests and game wardens to prevent fires and fishing/hunting without proper licenses and tags. Impose more fines where necessary.
- ➤ The Bitterroot River is being ruined by tourism as well as the addition of new and ridiculous laws governing our lands, forests, and rivers.
- ➤ I think the river is overrun with guides and not enough is put back to clean it up or maintain the fishery. Limit guide permits and regulate numbers of boats on the river.
- ▶ I feel that our fishing is in danger of falling off, further than at present levels. I do not feel that promoting this as an attraction is in the state's best interest.
- ▶ Lake Como is already overused. Local trails are overused.
- Our lakes and streams are overused by local residents as it is. They don't need additional pressure.
- Everyone should be able to enjoy what we have to offer.

- ▶ Families who visit our Valley are very limited [in opportunities]. The river and Lake Como or Painted Rocks are the only recreation.
- ▶ If the loss of attractions such as Sleeping Child Hot Springs to private holdings continues, it could have a negative impact on tourism. Also, we must protect easy access to public lands.

Comments about the Militia

- No militia camps! More events that support our Valley schools. → □
- ➤ I am concerned about the negative publicity generated by the antigovernment forces in the Bitterroot Valley and its effect on visitors wanting to come here.

Other Comments

- ▶ In the words of your cover letter, I do not think tourism development is a strategy to be pursued.
- Very little in the tourism industry encourages higher education, thinking, or global justice.
- The Bitterroot is a very nice place; however, it does not have a major attraction. Therefore, only time will tell. As the population of this country increases, so will the uniqueness of the Valley; however, by that time, it will be trashed like Missoula and no longer a pretty place.
- My feelings are: (1) tourism helps economy; (2) tourists should have sales tax to help pay for thousands of miles used of highways; (3) crime is perpetrated by locals; (4) tourists do little damage, they're just passing through, after all.

Date of tourists and out-of-staters played a part in wolf reintroduction to Yellowstone. This expensive program very likely will never produce any tourism dollars, and will be a hardship to other local industries. As a Montanan, I'm proud to share the beauty of our state, but let's remember it is our state.

Tourism and the Future of the Bitterroot Valley

Communities pursue tourism development comprimarily as an economic development strategy. Obviously, there are other options for communities economic development; some communities may be able to expand their retail or business services sectors, others may see options in concertain natural resource-based industries.

Since the mid-1980s, tourism development has been a popular economic development strategy for many Montana communities as well as the state as a whole. It is popular because travel activity has been expanding worldwide and thus there are opportunities to become established in the tourism sector. In addition, tourism development has been a natural strategy for Montanans, as we are able to capitalize on the attractiveness of our natural resources in the midst of declines in many of our traditional extractive industries.

When communities consider the industrial mix within their economic base, all local opportunities must be considered and balanced with one another. Some communities will have more limited opportunities due to various constraints, and will have an economic base that emphasizes one or two major industries. However, other communities may be able to diversify their economic base, perhaps providing for greater economic stability over the long run.

While the tourism assessment process focuses on tourism as an economic development strategy, two questions on the resident opinions survey solicited input as to the desired role of tourism within the local economy (Figure 4) and perceptions of sectors with the greatest potential for local economic development (Figure 5).

Only 12 percent of residents felt tourism should play a major role in the Valley economy; over half felt it should play a comparable role, and one third thought it should play only a minor role. When asked to rank the potential for economic development through tourism compared to other options, tourism or recreation development was one of five industries seen to provide good opportunities for future economic development in the Bitterroot Valley. Only manufacturing was ranked higher in terms of economic development opportunity.

Figure 4. Preferred role of tourism in the Bitterroot Valley economy.

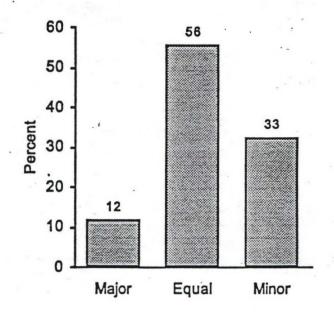
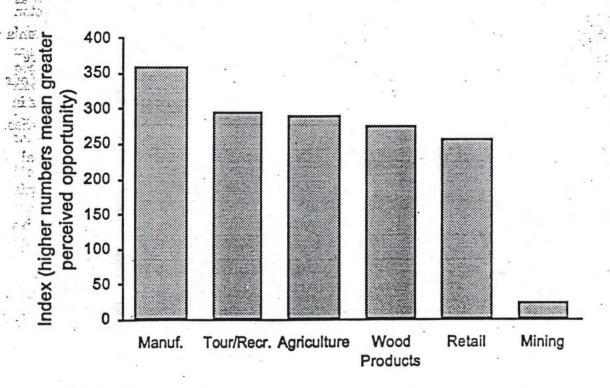


Figure 5. Best opportunities for future economic development, ranked by Valley residents.



While residents feel tourism should play a comparable role in a balanced local economy, it may be that tourism development is already at that desired level in the Bitterroot Valley. If one considers survey responses related specifically to future growth, the Bitterroot Valley's tourism industry seems to be at the point where further growth is less important than careful management.

Only one in four residents agreed with a statement that increased tourism would help the Bitterroot Valley grow in the "right" direction. Other questionnaire responses indicated the level of support residents gave to various aspects of managing future tourism development in the Bitterroot Valley.

Residents felt tourism should be managed, though not restricted; with resident involvement in the planning process, rather than leaving decisions to the private sector; and with quality of life considerations more important than the number of jobs created. Current Valley residents felt that tourists should visit the area but not become residents themselves. Finally, zoning was supported as a tool for managing development in the Valley.

- Increased tourism would help the Bitterroot Valley grow in the "right" direction (50% disagreed; 24% agreed).
- The Bitterroot Valley should develop plans to manage the growth of tourism (79% agreed; 11% disagreed).
- The Bitterroot Valley should take steps to restrict tourism development (49% disagreed; 32% agreed).
- It is important that Bitterroot Valley residents be involved in decisions about tourism (87% agreed; 5% disagreed).
- Decisions about how much tourism we should have in the Bitterroot Valley are best left to the private sector (52% disagreed; 22% agreed).

- The most important factor in determining how much tourism to have in the Bitterroot Valley is the impact on local quality of life (11% disagreed; 78% agreed).
- The number of jobs produced by tourism is the best measure of success for the Bitterroot Valley (60% disagreed; 26% agreed).
- I would prefer that tourists visit our area but not move here (71% agreed; 16% disagreed).
- A good way to manage development in the Valley is through land use zoning (73% agreed; 14% disagreed).

Vision of the Future

To plan for the future of tourism in the Bitterroot Valley, assessment committee members must consider the current tourism situation in the Bitterroot Valley as well as the vision of where they want to be at some future date. To provide one opportunity for community input into the visioning process, we asked respondents for their "vision of the Bitterroot Valley's future and what role tourism should have in that future." While we were seeking ideas about preferred futures toward which community leaders might manage, a surprising number of residents offered bleak views of their community's future. These and other comments offered by respondents are presented below.

Hopeful Visions

- Tourists are welcomed to come and enjoy, but don't forget to leave.
- ▶ Ideally, a mixture of specialized agriculture, sustainable wood products, information highway research, and niche manufacturing networks will allow us to preserve enough of what makes the Bitterroot what it is to provide a continuing role for tourism.

- The Valley has a bright future as long as Californians and Easterners don't make this Valley like the places they came from. Tourists should be taxed more in some way.
- Maximum use of renewable resources, retaining at least 50% of arable land for agribusiness, community college, and public transport system.
- Nothing but up and continuing to grow.
- Have more good eating places, not so many fast foods.
- ➤ The Valley will continue to grow and tourism should make it a better place to live. We should consider how to pull income from tourism to help our cities and towns (creating park districts, usage fees going to towns, etc.).
- My vision would be to maintain the quality of life here. Get better forest, land, and wildlife habitat management. If tourism can fit in and not impact the quality of life here; great, if not, then forget it!
- ▷ It should be a nice place to visit and yet be too small or rural for most folks to want to move to.
- ➤ Tourism should play a big role in the future. I think with more activities to attract tourists, families that already live here will have more to do.
- ➤ Zoning, sales tax, better county services (roads), and more funds for schools.
- ▶ We have a fabulous wilderness/roadless area. I think we should have a junior college here with an outward bound type program. This would afford education for our young people as well as bringing in students from all over the United States.

- ▶ I hope it stays as pristine and beautiful as it is now and that no economic development or tourism development ruins what so many have come here to enjoy.
- > Proper forest management.
- To be a good place to live and a better place to make a living. No more development or crowding of existing facilities.
- Tourism should have a positive effect on our area. Facilities (e.g., a convention complex) must be created to allow Bitterroot Valley to become a destination area.
- Since we do not have industry to speak of and limited agriculture, tourism provides a way to bolster the economy in the Valley. Of course, we would benefit from a sales tax, too.
- ➤ I would like to see slow growth in the Valley. I would like light manufacturing businesses to develop resulting in jobs offering good hourly wages. The Valley needs a comprehensive plan to avoid uncontrolled growth. I believe gambling and tourism should be emphasized much less in order to maintain our current way of life.
- The Bitterroot should remain agricultural with small towns to support the agriculture community. For this to happen, zoning will have to be enforced to stop subdividing by developers. I've already bought property in the Lemhi Valley of Idaho for the future because I don't see this happening here.
- Durism is important. I feel the city and county government need to implement some sort of tax on motels so that their use of our area will not be a burden to those of us who live here.

- ▶ I would like to see this Valley remain a beautiful place to live, with clean air and a low crime rate. In other words, promote tourism, but discourage the overdevelopment of housing and business. As far as I'm concerned, our beautiful surroundings are our biggest asset and (in the long run) will benefit us more than short-term profit for a few money-hungry developers.
- Visit, but don't stay!
- A gradual, natural flow of increased tourism which will give the people and the government time to adjust to the changes (the many changes), good and bad. Push for livable wages!
- The future, or growth, of the Valley, is in the hands of people moving in with high incomes from out of state. They will desire good retail stores and restaurants with good service. Tourism will bring this, along with the professionals to work in these positions.
- Less growth, more concern for new job industries.
- ➤ Tourism attractions based on the natural/ historical aspects of the area – not "created" attractions (i.e., Disney World).
- ➤ The Valley has a beautiful rural character that must be protected by intelligent land use planning. Tourism, and the resulting development, can be accomplished and be a positive influence to us all if properly planned. Tourists must also provide positive economic assistance to residents. Developers and real estate interests should not be the driving forces in promotion of tourism nor have significant voices in tourism issues. In case after case, in areas of natural beauty where development is occurring, development interests have unduly influenced decisions of planners and the general population by their self-serving motives.

- ➤ There will be some tourists returning to make their homes and enjoy the most beautiful place in Montana. I love it and thank God everyday that it's my home.
- ➤ I would like to see planned and controlled development to preserve the character of the Valley as well as careful monitoring of ground water, air quality, and population growth.
- The Bitterroot Valley is going to grow and tourism will be a part of that growth. But a healthy economy depends on diversity. Tourism should not become our focus or push out other more stable (though perhaps slower growing) industries. Also tourists shouldn't decide our future. We who live here need to manage our resources, not outsiders with no understanding of our land or our lives.
- Come spend their money and return home!
- Mixture of light manufacturing and retirement. Tourists should be led to realize that coexistence is not only possible, but beneficial.
- ▶ It is my hope that the Bitterroot can maintain clean air and water as well as its visual beauty, yet at the same time provide employment for those who live here. It seems light, non-polluting industry and tourism could help do that.
- The Valley is becoming a long retirement community. Tourists have always passed through to get to Flathead Lake where they can participate in family recreation. Tourists will always see our Valley from their vehicles, unless we put in "traps" as on Route 2 to Glacier.

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- A bright future if we get some type of control on development. The window of opportunity is closing. The county should stop all subdivision until a plan for growth is in place. Tourist events should be developed around Valley culture, history, storytelling, powwows, and natural history.
- Visit and move on.
- Would like recreation-oriented tourism encouraged. No "uptown" casinos, no big city malls. Encourage RV parks, recreation, year-round opportunities. Not much advertising is needed to bring people to the area.
- My vision is to remain wild and beautiful. No more Jackson Holes or Coloradoes.
- ▶ I would like to see an industry come here that would be environmentally safe, with decent wages for our own people. Tourists only cause the prices to go up in the grocery stores, fill up our few recreation sites (lakes, rivers, etc.), and have high impact on our highways.
- Development of more destination attractions – better museum facilities, forest interpretative center, large native flower gardens, etc. Also, some very major attraction that we can become famous for.
- ➤ Tourism will play an increasingly vital role as the nation's supply of "beautiful spaces" is depleted. Planned development of a tourism sector of our economy will help ensure that the Bitterroot Valley retains its "beautiful spaces".

- ▶ I would like to see growth, and more jobs, but at the same time I would like to see its beauty preserved, the forests kept sacred and closely monitored. I hate the thought of overpopulation, and with that always comes an increase in crime. I want to feel safe about raising my two children here without overpopulation in the schools, violence, etc. Growth is good as long as it is monitored.
- ▶ Fair vision of the future; tourism should be well controlled.
- A stable economy with a diversified base. Planned growth with the goal of maintaining the quality of life that we now enjoy. Tourism should play an important role in providing a stable and predictable portion of the Valley's income.
- Tourism is a strong alternative to more environmentally-damaging development.
- ▶ Wanted or not, tourism will have an impact on the Bitterroot Valley. I would hope that my family and friends will continue to be able to visit this Valley and that they will be welcomed. While here, their contribution to the local economy is considerable.
- ➤ The Valley seems to be moving towards summer homes, recreation, fishing, hunting, retirement. All of these areas seem to be in harmony with tourism.
- Growing, making it more stable economically.
- Tourism should and will play a significant role in the Bitterroot Valley's future.
- The Valley will probably grow but I really don't think that tourism is a great factor because businesses are supported where it counts by the ones who live here, not the ones who pass through.
- Conservation of natural resources. An example of the harmony and beauty that can bring.

Bleak Outlooks

- ▶ I hate to see all the new housing developments; I'm concerned about water, sewage, etc. I would like to see a planning committee do a reasonable prediction of growth and try not to expand too fast.
- Need manufacturing jobs so families can afford to live here in the Valley and not be forced to move away. Tourism should not be the #1 concern.
- ▷ I see an overdeveloped residential market with very few good-paying jobs. I feel tourism promotes very few good jobs for the impact it has, and should not be our first priority.
- D Going from bad to worse. Leave it alone.
- ➤ The Valley is getting too crowded. Crime is on the rise. There are too many people who come here to live.
- ➤ This place could easily become another Vail or Aspen, Colorado – strictly a playground for the rich – and would not enhance people's lives who like it here (because of clean air, water, etc.) because they would be forced to move to another lower rent district in order to survive financially.
- Come enjoy the Valley and go home. Too many houses. Too many people.
- There will be more tourism in the future [even] if nothing is done to bring them in. In the long run, tourism will have a negative effect on this Valley.
- ➤ We see the Bitterroot Valley becoming overcrowded and the quality of life diminishing.
- ▷ I see another Las Vegas, Nevada, or Deadwood, South Dakota.

- ➤ Tourism is changing the face of the Bitterroot in a negative manner. I would like to see tourism controlled by means of a sales and/or bed tax.
- ▶ I feel that tourism, if promoted, will completely ruin the Valley. I've seen it happen in other places. It draws too many undesirables and promotes all types of crime. It would kill the reason for which 50 to 60% of the people live here.
- The Bitterroot will continue to grow, and the Californians will continue to come and pay high prices for everything and take jobs at low pay rates.
- Our sewer system has faults now and might not handle the additional load. Highway 93 is unbearable now.
- ▶ I have some real concerns about growth in the Valley and am not sure this [place] ² would be my choice if I had it to do again. I'm not anti-growth but am concerned about our direction. I'm not sure of the role tourism plays in this.
- Oculd go downhill unless everyone develops more civic pride. The clutter and untidiness of properties is terrible. It seems to get worse and, if this continues, I don't think the Bitterroot will continue to be a pleasant place to visit.
- ▶ Future is bleak unless counties get the upper hand on uncontrolled indiscriminate subdividing and commercial strip development along Highway 93.
- Growing way faster than I would like see. Big city attitudes are changing our Valley drastically.
- Not very good, the way development is a occurring.
- Too much congestion. Law enforcement is overworked – too many outsiders want to make their own laws, and not obey our Montana laws.

- → 3000 homes! there goes the Valley.
- My vision of the Bitterroot Valley's future is less decent paying jobs and more retail service jobs. Only the wealthier retirees will be able to afford land or homes. Tourism could become a year-round attraction.
- Overcrowded, overdeveloped, and complete loss of what brought them here to begin with.
- Continued low-paying jobs for the working people and tourism will only add to the low-paying jobs.
- Population growth in the Valley is continuing and with that growth comes many "outside" influences. It will happen and, in fact, is already taking place − planning and management are the key. We can't stop it, but we can evaluate and plan ways to control it. Tourism is a natural offshoot to growth and beauty such as we have here in the Valley.
- My vision is that the Bitterroot Valley will experience rapid growth as big-moneyed, big city refugees migrate away from their "hell holes". I do not believe in efforts to curtail anyone's right to move or relocate as they wish. But it is unfortunate that as this migration continues, the property values (and property taxes) are and will continue to force people to move away and the demographics will change.
- Uncontrolled growth with congestion, more crime, and higher taxes. Let tourism take its own course.
- ➤ Tourism will be lost because of the tremendous, fast growth in the Valley. Tourism is a great money maker for the Valley, but in the near future who would want to leave the city life and vacation in another city?
- Not a good future because services such as police and roads have not kept up with problems brought in with tourists.

- Continued growth and the end of a great place to live. Tourism is not a related issue, regarding the fate of the Bitterroot. People escaping worse places, and bringing their city "ideals" with them, turn the tide toward exodus.
- ▶ I see the Bitterroot Valley's future as this: in 50 years the Valley will be house to house from Darby to Lolo.
- My vision of the Valley's future is too much population growth − water quality problems, high real estate prices (making it impossible for the natives to compete), air quality problems, increases in crime.
- > There are going to be many more houses or homes on small acreages.
- My vision is the Bitterroot Valley being like Aspen, Vail, or Lake Tahoe! An overpriced, no industry, overcrowded place to play, where we natives have to move away from in order to find employment that pays over minimum wage. I have no problem with reasonable tourism, but there is a reason people used to like our way of life. As we get trampled, that quality changes. How about a little leadership as we steamroll our tourism concerns.
- Each additional person in the Bitterroot makes an infinitesimal reduction in the quality of life of those already here. I don't know how many infinitesimals it takes to make a finite unit, but why promote it? It's going to happen regardless, but I would prefer foot dragging to pushing.
- Unless we can agree on and pass a comprehensive land use plan, we will continue to experience hodge-podge, chaotic, and helter-skelter subdivisions, increasing traffic congestion, etc. until there is precious little left to attract tourists or anyone else.

- Overcrowded, polluted, good for business, not so good for quality of life – unless we have excellent land use planning with a strict septic permit system.
- → The Bitterroot is doomed.
- ▶ Basically, as in many areas, this Valley has changed drastically since I first came here 15 years ago. It's a snowball headed for hell if some controls are not applied soon. Good luck to all of us!
- ▶ I am concerned about uncontrolled growth in the Valley. If steps are not taken now to put a lid on this problem, tourism will decline to a dangerously low level.
- Dourism could have a great role in the economic development of the Bitterroot. One concern is how "we" are going to keep up. We are already way behind in traffic control. My other concern is that the typical Bitterrooter will not be able to live here comfortably because of the out-of-state dollars that are already causing stress. The schools are already over-crowded and a lot of people refuse to help fill the needs of the community. We should be taking care of the needs of our people first!
- ➢ Historically and consistently, it is characteristic of this area to invite beauty lovers to visit with only limited community resources to support them. Resources are not adequate for a large population in the Valley.
- Confusion and congestion.
- D I am concerned with the rate of growth. I moved here for a quality life in 1976 and hate to see too many changes.
- ▶ I see much building and general use of A land and space and much overuse of our roads in the Valley. I am of the older generation, so I may be a bit biased in some of my likes and dislikes.

- My vision of the future is dim, unless strong measures are adopted to manage the growth. Tourism, being inevitable, should be restricted through careful management.
- ▷ It's going to be strictly a retirement area as there's no industry here to support young people with families. People will flock in to get away from earthquakes, floods, etc., but won't be able to afford homes and there will be no jobs.
- Down play tourism. The future doesn't look so good. Lack of clean air and adequate water are major concerns, not to mention the extreme increase in traffic and accidents. I fear the day my children begin to drive. We have a lack of experience to drive as defensively as you need to around here; I have close calls daily on Eastside, as well as on 93 and at crossings.
- Although I am not against tourists, tourists see how nice, peaceful, and beautiful the Valley is. And this gives them the idea to move here, overcrowding the Valley.
- ▶ I liked the Bitterroot Valley as it was 30 years ago. Unfortunately, tourism is on the increase a situation which is not likely to change. We, therefore, need to develop methods of dealing with this increase so that the impact is pleasant for all concerned.
- I am sure this Valley will continue to grow and develop. I do not like to see it change, but it is inevitable so we must accept this. I hope this growth can be orderly and also not tax us our of our homes to provide needed services, such as schools, fire, streets, water, sewer, etc.
- ▶ Ultimately the Valley will fill with people who take for granted what we have here, and the quality of life will deteriorate as it has already in most parts of the country.

- A very overcrowded Valley. Taxes and prices so high that people on fixed incomes will not be able to live here.
- ▷ Retirement Valley for residents from states with overpopulation, high taxes, and high crime rates. Unfortunately, tourism will promote more retirement here, and increase population, taxes, and crime rates.
- D Bleak.
- I see the Bitterroot growing dramatically each year. I'd hate to see it become another Aspen. Tourism has a major role in development, as I talk to numerous people who come to visit, fall in love with the area, and move here. Most of those people do care about the beauty, but for those passing through... how do you educate an entire nation of consumers to pick up after themselves and respect the beauty they came to see? I'm afraid for the most part they use and abuse it.
- The future for the Bitterroot is bleak—
 the quality of life is poor and crime is
 rampant. Sewage is in all the aquifers
 and recreational opportunities are minimal. I would like to see tourism dumped.
 The only people who are going to benefit
 from tourism are real estate people.
- ▷ I see a steadily deteriorating future; a tourist now and then wouldn't hurt.
- ▷ I see too many people for the Valley to sustain. No jobs, too little pay.
- My vision of the Bitterroot Valley's future is without me living in it. As soon as I can sell out, I'm out of here!
- Extreme growth subdivisions from Florence to Hamilton. A lot of people want to live in the Valley and they're coming in fast. Unfortunately, the open fields along the route from Hamilton to Missoula will eventually be filled with homes.

Too much growth, too fast. We need more county planning for control of growth and its impacts on education and law enforcement.

Other Suggestions

- Tourism should help finance and mandate city-county land use planning.
- I don't think tourism is a sound economic industry. It is usually comprised of a few promoters (paying minimum wage) extracting some profit from tourists, while locals have to pay for the services and wait in line. We need more basic industries like the log homes, medical research, or light manufacturing to really realize economic growth.
- ▶ We are simple people, who want simple things out of life not radical change caused by newcomers moving into the Valley from large cities. If tourism could promote our peaceful way of life and attract people wanting our lifestyle, that would enhance the Bitterroot Valley. Unfortunately, in many instances, newcomers bring with them their ideas of what we should become, and don't appreciate what we are.
- ▶ People in all walks of life are different. Some tourists come here and appreciate and enjoy the area. Others take advantage and misuse it. I believe it is called respect... If there could be a way to enforce that, tourism would never be a problem.
- ➤ As long as there is responsible planning, all will benefit. Who are we to deny this beauty to others? I'm sick of the attitude in this Valley against tourists and transplants.

- ▷ I believe the Bitterroot would best be served by having clean industry. Every-body wants to live here, yet few want to sacrifice income, accept local development, or in essence grow (not just economically, but socially). Manufacturing clean retail products and marketing them elsewhere; rich people buying summer (or better yet winter) cabins here, but living elsewhere; winter tourism to balance out our summer-winter economic cycles all are top considerations in my view.
- Need to control signs in the Valley. Need zoning. Need improvement in traffic system. Tourism should be part of Bitterroot Valley's future.
- ➤ Tourism should have a minor role in the Bitterroot Valley's future because it is seasonal.
- There will always be people trying to get away to the calm and quiet of the Bitter-root. Take tourism slow or you'll be overrun and ruined by too much too soon.
- Dourism's role should remain minor. If it becomes major, this will be a grievous error and all who truly care about the Bitterroot will pay a high price in exchange for what we all "once had".
- ▶ In a mountain/rural community, I believe more people have to have a truly landbased, natural resource-based economy and wealth. Tourism is a want-driven industry and as such is unstable.
- The more tourists we have, the more new families are going to be coming permanently. Already we are plagued with traffic congestion, "out of sight property prices", and a marked increase in crime. My opinion is don't encourage tourism—there will be more than enough on its own. I say to those who come anyway: "Look, don't touch, then go home."
- Planned and controlled growth is not all bad.

- ▶ I don't believe there are enough attractions in the Valley to greatly increase tourism. We have many friends and relatives that come to visit (they think the Valley is beautiful) and then they move on.
- The role of tourism should be positive, provided those aspects of the Bitterroot are not destroyed by over-lumbering, overmining, and over-developing the Valley.
- ➤ Tourism should have limited application because the jobs are mostly low-paying.
- The Valley is going to grow no matter what we say or do; we just need a little control over the growth.
- ▶ I feel the local real estate agents are overselling the Bitterroot Valley. I guess I'm fearful of tourism; we are growing too fast.
- ▶ Let nature take its course less bureaucracy and government.
- ➤ Tourism should have a small part preferably people just passing through quickly and not coming back.
- ➤ You can not stop tourism, but it is too bad when a lot of people's income for the year is geared to 3-6 months of tourism income; then the rest of the year they make almost nothing. Tourism creates a lot of low-paying, temporary jobs.
- ➤ Tourism should have a minimum role.
- ▶ Role: none. Tourism will come you can't close roads.
- ▶ I would not want tourism to be the whole vision. We need to build on residents [not tourists], and jobs to keep families here that want to stay here. Our quality of life depends on people working in the community year-round.
- ➤ We dare not become exclusive in our attitude, or snobbish.

- ▶ I think a task force should look at other successful tourist areas and learn from their expertise. Tourism will be in this Valley whether locals want it or not, so be as well prepared as possible. Some success stories are: Leavenworth, WA; Polson, MT; and Kimberly, Alberta.
- ▶ Increasing population and decreasing supply of natural resources like timber. Increases in tourism could bring in outside dollars to help offset the losses of local revenue from extractive industries like logging.
- ▶ Limited tourism.
- Think 10 to 15 years ahead.
- ➤ To develop places such as Lake Como at the cost of local taxpayers just so out-ofstate tourists can feel pampered is not the kind of tourism that needs to be developed here. They should leave things the way they are so that the more adventurous visitor can afford to enjoy Montana. Do not develop Montana into destination resorts!
- Since we can't stop tourism and we shouldn't profit from it except for retail sales, tax it to allow it to pay for the extra services it demands.
- □ Little role for tourism.
- ➤ We need quality employment opportunities for present and future residents which will provide a tax base and an ability-to-pay sufficient to provide necessary government services.
- ➤ The Bitterroot has been discovered. We can stick our head in the sand or we can begin to plan and accept what is going to happen.
- ▶ I think we have no choice but to promote tourism.

- ➤ Tourism should play a large role, but industrial parks, improved roads, and good planning should come first.
- Promote tourism and plan and develop the industry in such a way as to meet the pressures on all webs of services in the Valley.
- ▶ We need all the help we can get in the Bitterroot because the "City Fathers" would never let any business come in. Thus tourism, which no one can keep out, comes in. I've witnessed this for many years.

Ideas for Tourism Development Projects

If the assessment committee determines that tourism development is a wise strategy for future economic development, they will identify possible short- and long-term projects to be ranked and further evaluated for their economic, social, and environmental impacts.

Respondents were given an opportunity to offer ideas for these projects. While a number did offer suggestions, many respondents expressed concerns about financing of tourism development and potential impacts, including traffic congestion, that may result from increased tourism. Furthermore, as suggested earlier, many residents expressed opinions that there is already enough (or perhaps too much) tourism, or, that the focus on tourism development is somehow misdirected — that there are more important issues to be addressed in the Bitterroot Valley.

Ideas

- ➤ Keep it basic, rustic; preserve natural beauty. Keep it accessible but not too accessible – used but not swarmed over – basically as is.
- ▶ No changes.
- Clean up the river from Stevensville to Florence. Get rid of the junk cars. Keep roadways and camp areas cleaner. Make welfare put people to work for a check doing the clean up.
- Clean up campaign to obliterate the trash and junk, at least from the Highway 93 corridor.
- A major clean-up program private dumps and unkempt properties detract. "Westernizing" or "frontier-nizing" strategic businesses and other areas - develop some common themes.
- ▷ Bike trails. More mountain access for foot and horse travel. Affordable lodging.
- (1) Development of snowmobile accesses and services and marketing of this aggressively as an enjoyable tourist vacation sport. (2) Development of golf course services (and related sub-businesses). (3) Encouragement of summer-cabin tourism in the high end market. Direct costs of custom homes, golf, and related expensive sports. This is a clean industry and well suited to our construction-heavy employment. (4) Manufacturing of MT-made products to outside markets; this is not necessarily tourism, but is along the lines of a clean, economic industry.
- ▶ Wilderness safe houses for grizzly bear advocates. Signs at every trailhead that say "all who enter, you have just entered the food chain".

- Once a month (or more often) rodeo in summer. A zoo with native animals. Some type of a western show with local people participating.
- Rebuild Fort Owen as a working Living History Center.
- More emphasis on wildlife and wilderness protection.
- Dude ranches, community support of local artists, destination golf courses, recreation outfitting, rodeos, festivals that celebrate Rocky Mountain heritage, continued restoration of Daly Mansion and stables.
- ▷ Recreational passenger railroad from Darby to Missoula. Valley tours by bus. Destination recreation complex.
- Guided tours by travel guides and recreation guides, etc. Golf courses. Forest Service could provide lectures in building facilities as well as outdoors.
- Convention center, sales tax, remodel fronts of buildings in towns, beautification of Highway 93, improvement of Eastside Highway. Light manufacturing should be one of the definite goals of the Valley.
- Operate a "Valley" excursion train daily, in summer, between Missoula and Hamilton on existing MRL track.
- → Water park.
- More campgrounds. More access by road for people not wishing or not able to hike.
- More bed and breakfast places. More bazaars. More parks.

 → More bed and breakfast places. More bazaars.

 → More bed and breakfast places. More bazaars.

 → More bed and breakfast places.

 → More be
- ▶ Panning gold for tourists, convention center, sports complex.

- A festival type event (e.g., Libby Nordic Fest) based on a historical event such as Lewis and Clark or others. Powwow at Daly Mansion was good. More bike paths may be attractive.
- Historical education programs (Lewis and Clark, Salish-Kootenai, Marcus Daly, etc.). Always include the precious balance of tourism impact on river systems and backwoods areas.
- ▷ Better roads, more camping areas.
- Sawmill tours and self-guided, signed forestry site tours.
- ▶ We need more big RV parks for retired folk – they are the spenders. We could have them for 3-4 months, resulting in low impact on the environment and big economic impact.
- More developed campgrounds. Public access to fishing streams. Enhanced fishing.
- ➢ A bicycle/walking/hiking trail with campsites and shuttle bus going the length of the Bitterroot.
- Outlet mall. Ecotourism partnership with BNF. Jeep tours of high country (like Sim to Ouray, Colorado). Expansion of downhill ski area (Lost Trail) and lodging development.
- Expand Lost Trail ski area.
- ➤ Theme park, gambling.
- Government grants for "Green Projects". For example: (1) outdoor survival courses for teens and adults, (2) organized hike (day and longer) trips, (3) organized river float trips.
- Conservation tours.
- ▶ Advertising.
- ▷ Better advertising.

- ▶ Marketing.
- ▶ Better signs and advertisement on a local level.

Financing Tourism (and other equity issues)

- ▷ Bring in more money interests to invest in better facilities.
- Use the bed tax to help pay for local services, not to promote more tourism.
- ▶ Impose a 2% sales tax on all out-of-staters and apply that to improving our highways.
- ➤ Tax out-of-staters at least \$.08/dollar (with Montana cardholders exempt from tax).
- ➤ A local option sales tax on "luxury" or non-essential items such as dining, lodging, and recreational services.
- Insure tourists pay for the use of our Valley by some means that does not cost current residents also.
- ➤ Full time RVers and "summer snow birds" come here to enjoy northern state climates in the summer months. Most of the states they come from charge Montana winter visitors sales tax. I believe we should be exempted from their sales tax if we do not charge them any in our state when they visit here.

Concern for Impacts

- ➤ Take a look at Branson, Missouri. It was a beautiful Ozark town. Now it is a disaster area (overcrowded with no infrastructure).
- I've been to places like Sun Valley, Whitefish, and Jackson Hole; tourism on that basis makes it impossible to afford to live in these communities unless you're on the upper income scale.

- ▶ If we need to develop tourism, let's promote "ma & pa" shops something to promote the quality of life, education, or self improvement; not what we can rape out of our community before the whole state of California moves here.
- ➤ Tourism should play a minor role in the Bitterroot Valley, to minimize its impacts on recreational facilities and pollution.
- Do not encourage tourism into wilderness areas; develop non-wilderness sites.
- ▷ If tourism is going to be developed, it needs to supply income year-round and not a lot of temporary low-paying summer jobs. Also the impact on our recreational sites, hunting, and fishing are enormous, and the residents of the Valley pay the price along with the wildlife. I think it is a beautiful place to live, but you can develop too fast and too big for the area to support.
- ➤ Tourists are welcome to visit the Daly Mansion, museum, Ravalli County fair, but not to stay.
- Dourists are welcome to come visit but not to stay. These people move here because they like the area and our way of life, but soon want to change everything to what it was like in the area that they disliked and moved here to get away from.
- ➤ Tourism would be good for the Bitterroot if it is developed carefully. I don't want to see tourism override other types of local business. It should not develop into a tourist-trap environment.

- ▶ I think that as long as tourism is going to cause the cost of living to escalate, that there should be more lower income housing made available to those of us who are working hard but still having to compete with the ever increasing rent payments. There's not enough affordable housing for the Bitterroot people, because tourists and out-of-staters who move here are willing and able to pay \$500-600/month for rent; we are not.
- Tourism only promotes low income jobs, impact on streams and rivers, and impact on hunting.
- ▶ Put into place high building code laws and strict zoning laws.

Traffic

- Any tourism development project must consider Highway 93 and the increased usage it will receive with more tourism. It must be widened to 4 lanes or at least have several areas with a passing lane.
- Widening Highway 93 would help accommodate the increased traffic tourists bring. Tourists should contribute to the local quality of life and economy through taxes perhaps on gas during summer months or on lodging and services or through higher campground fees?
- Accommodate increased traffic with better road systems and maintenance. Frustration in this area runs high and makes old timers' and new residents' irritability levels rise a measurable degree.
- ▶ Four lane Highway 93 from Missoula south to Salmon; County-maintained restrooms to ease private facilities; and the rest will follow.
- Make sure the traffic patterns can handle the increased use before development blossoms. There is nothing worse for morale than to be stuck in a traffic jam of seasonal traffic while on the way to work.

- ➤ Four lane Highway 93. It's the pits and has been far too long.
- Impose a 2% sales tax on all out-of-staters and apply that to improving our highways.
- Construct a new highway to accommodate the traffic.
- ➤ Encourage and enforce slow moving traffic to yield to flow of vehicles stacked up behind.

Too Much Already

- ➤ The question assumes we want increased tourism, I don't.
- ➤ There is already enough.
- Don't want tourists; they just encourage more population here.
- As I've told many others: If you're looking for tourist attractions don't come to the Bitterroot Valley; if you're looking for a great place to live come to the Bitterroot Valley. "Tourist attractions" could change the way I feel about living here.
- ▶ I hope there is consideration given to offseason uses for the tourism projects – similar to the peace-time conversion of the military industry.
- ▶ Having lived most of my years in a high tourism impacted area, I feel tourism is the last thing I would choose as a benefit to the economy. It wrecked the other place for the residents.
- Don't develop.
- Don't.
- ▶ Put signs on both ends of the Valley that say "Gut shoot 'em at the borders".

- ▶ I don't want to see any development. I feel the Valley is too crowded now.
- ▶ Please don't promote our little Valley anymore. We are losing the quality of life at a rapid enough rate as it is!
- ➤ From the 70's I've seen tourism increase. The people that move here are tourists that have been here before. They bring with them crime, drugs, and other big city problems they are trying to leave behind. The only development of tourism I would like to see is the lack of it.
- > Forget it.

Misdirected Focus

- Tourism provides only a minor non-yearround business for the Valley as opposed to solid year-round manufacturing facilities.
- Most sides of tourism have negative effects. We need a more sound economic base to stabilize this Valley, not concentrating our efforts on the continual rise and fall of tourism tides and their trickle down effects that cheapen our way of life here.
- Dilbelieve we need to focus on things that build families and right, wholesome living. Gambling and alcohol-related attractions destroy the kind of image I want us to be known for. Do we actually have enough "attractions" to warrant the adverse results that come from an influx of tourists. Focus on quality, not quantity.
- ➤ The Bitterroot Valley does not have the major tourist draws – big water or major skiing – therefore tourism development would result in a commercial, junky tourist trap, and we are too far gone for a cutesy tourist trap.

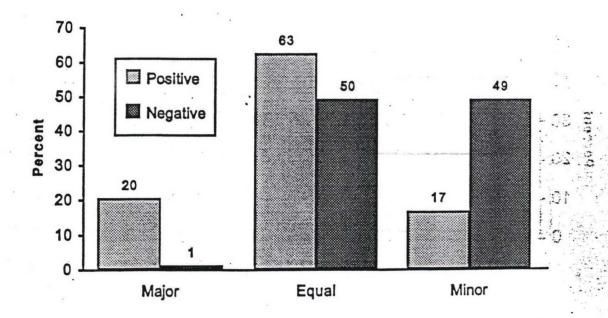
Forget the tourists! What does this Valley offer young teens? Our local teens are being picked-up for shoplifting, MIP's (minors-in-possession), breaking into homes, and property destruction. Give them somewhere to go that doesn't cost parents half-a-week's wage to entertain a teenager – video arcades, movies geared for teens only (shown on special nights), a local ice rink.

Distinguishing Supporters from Non-Supporters

Earlier, when discussing resident perceptions of positive and negative impacts, we said that those Bitterrooters who perceive positive impacts and not negative ones may be said to be positive about the industry. Conversely, those who perceive negative impacts but not the positive ones, were said to be negative about the industry.

To address our final objective of identifying distinguishing characteristics of those who support tourism and those who do not, we used a statistical procedure to group the respondents to our survey into two groups—those who held relatively positive opinions about the industry and those who held relatively negative opinions. As might be expected, those with positive opinions were much more likely to prefer that tourism play a dominant role in the Bitterroot Valley economy (Figure 6).

Figure 6. Preferred role of tourism in the Valley economy, by whether respondents had generally positive or negative opinions about the industry.



Through cluster analysis, we grouped those who had similar patterns of responses to the twenty-two opinion statements regarding tourism impacts and management. While the differences between groups are more important than the relative size of the groups, 54% of respondents were placed in the "positive" group and 46% in the "negative" group.

By definition, the positive group perceived the greater positive impacts and vice versa for the negative group. Nevertheless, it is interesting to compare the responses of the two groups to the statement that the overall benefits of tourism outweigh the negative impacts (Figure 7).

Members of the two groups did not differ with regards to several standard demographic variables, including gender, age, household income, or being born in Montana. Those who were positive about the industry had slightly higher education levels.

While the two groups did not differ on age, those who were negative about the industry had lived longer in Montana and in the Bitterroot than those who were positive about the industry (Figure 8).

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Finally, we asked respondents to indicate how they were personally affected by tourism. We asked how they felt they were affected overall as well as in terms of economic, cultural, and recreational opportunities. We also asked them to indicate whether they felt their job security was positively or negatively affected by tourism (Figure 9).

It is notable that even those who were positive about the industry felt, on average, somewhat negatively impacted in terms of their recreation. Those who were negatively disposed toward the industry felt these impacts even more strongly and the importance of this impact seems to be reflected in their assessment of overall impacts. In contrast, the negative impact on recreational opportunities did not seem to affect the overall rating of the positive group.

Figure 7. Responses to the statement "The overall benefits of tourism outweigh the negative impacts", by whether respondents had generally positive or negative opinions about the industry.

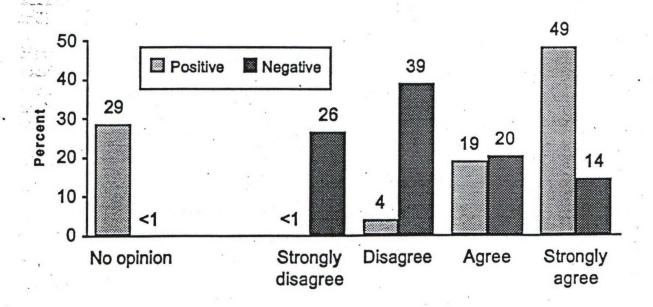


Figure 8. Length of residence (years and percent of life) in Montana and the Bitterroot Valley, by whether respondents had generally positive or negative opinions about the industry.

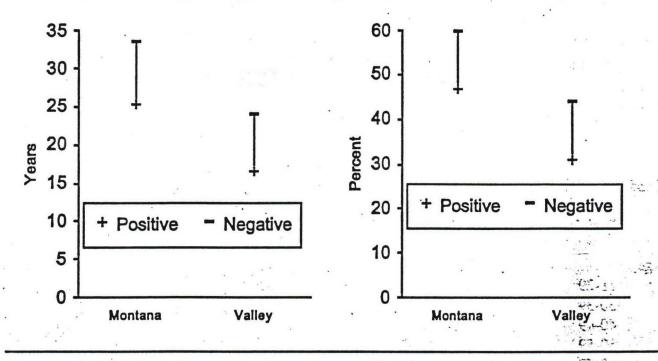
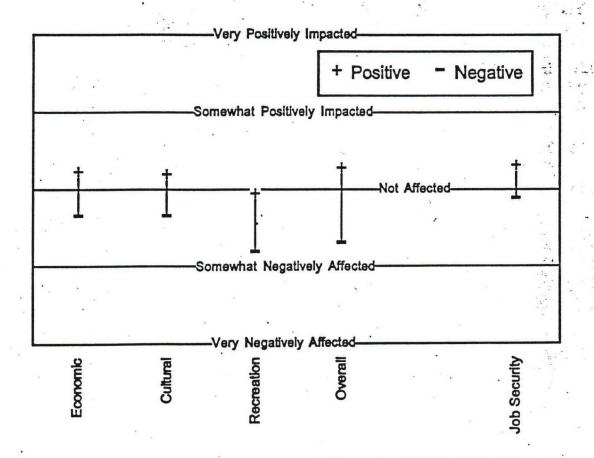


Figure 9. Average (mean) responses to questions regarding how respondents were personally affected by tourism, by whether respondents had generally positive or negative opinions about the industry.



APPENDIX: RESPONDENT DEMOGRAPHICS

To allow comparison to other Bitterroot Valley surveys and to further define our sample for the benefit of our readers, we provide the following outline of the demographic characteristics of our weighted database.

	A second was to be a second of the second of		
Gender	Years Lived in Bitterroot Valley		
Male	58%	0-5	24%
Female	42% -	6-10	. 17%
		11-15	10%
Age .		16-20	16%
18-29	4%	21-25	5%
30-39	16%	26 or more	28%
40-49	25%		
50-59	18%	Education -	
60-69	17%	High school or less	23%
70-89		Some college	13%
		College graduate	14%
Born in Montana		Post-graduate study	19%
Yes	31%		
No _	69%	Household Income (1994, bef	fore taxes)
1. April 7. April 1.		Less than \$10,000	10%
	ntana · · · · · · · · · · · · · · · · · ·	\$10,000 to \$19,999	20%
0-5	15%	\$20,000 to \$29,999	21%
6-10	14%	\$30,000 to \$39,999	15%
11-15	6%	\$40,000 to \$49,999	11%
16-20	14%	\$50,000 to \$59,999	8%
20-25	6%	\$60,000 to \$69,999	5%
26 or more	45%	\$70,000 or more	10%

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